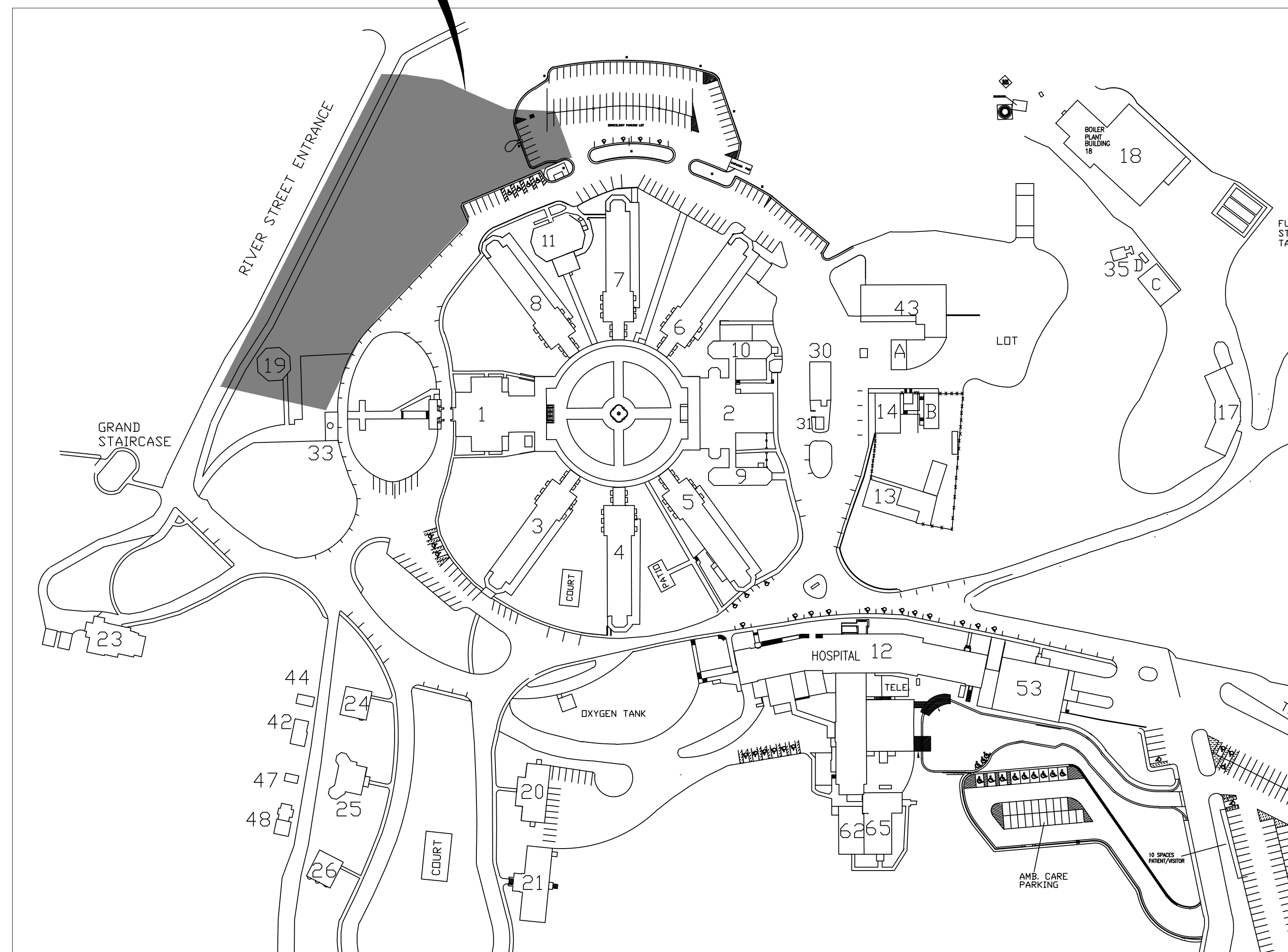


# HSVA RIVER STREET WATERSHED IMPROVEMENTS

## VETERANS ADMINISTRATION HOT SPRINGS, SD

PROJECT NO. 568-13-202

APPROXIMATE  
PROJECT  
LOCATION



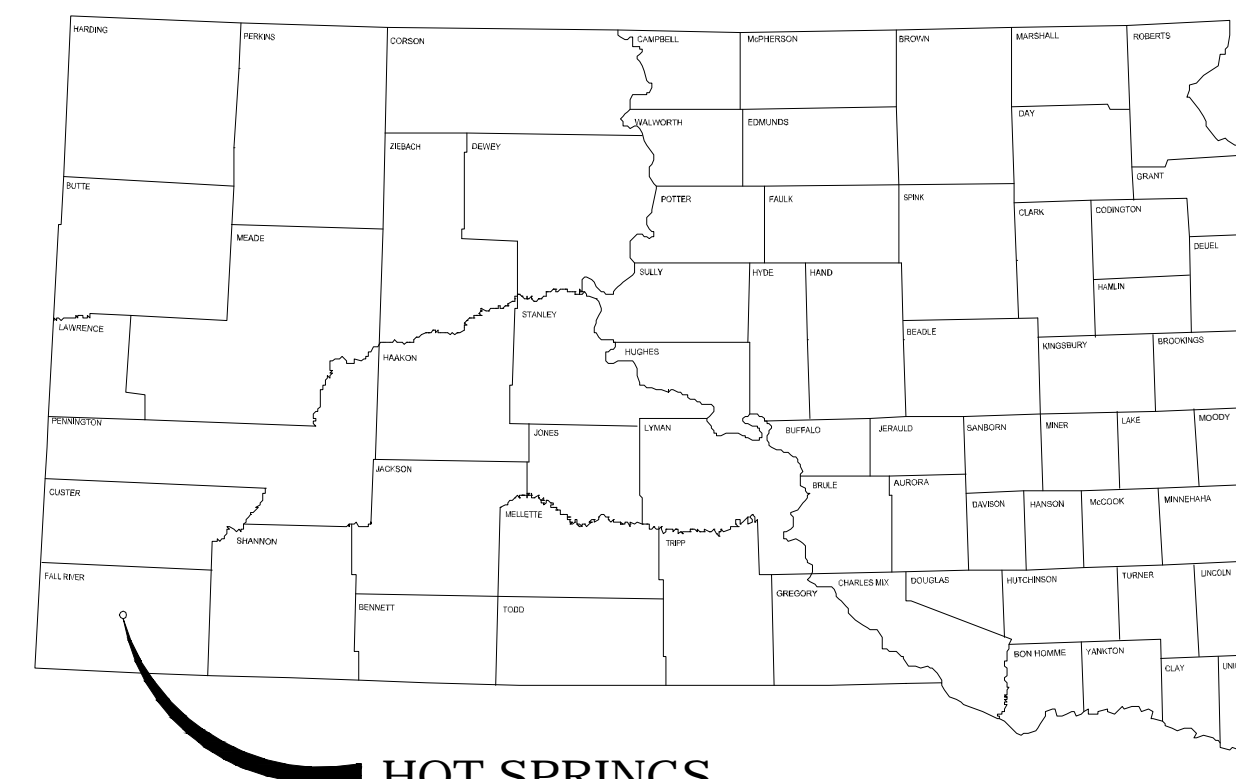
PROJECT LOCATION MAP

NOT TO SCALE

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### SOUTH DAKOTA



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HOT SPRINGS, SOUTH DAKOTA

REVISIONS:

Project Number: 568-13-202

Date: 10/10/12

COVER  
SHEET

G1.01

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SPECIFICATIONS TO BE USED

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF VETERANS AFFAIRS MASTER SPECIFICATIONS EDITED SPECIFICALLY FOR THIS PROJECT. THE PROJECT SPECIFICATIONS ARE ALSO SUPPLEMENTED BY THE CURRENT VERSION OF THE SDDOT "STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES", DIVISION II AND DIVISION III AND ASSOCIATED PLATES WHERE SPECIFIED. THESE TECHNICAL SPECIFICATIONS SHALL BE UTILIZED WHEN DIRECTION IS NOT SPECIFICALLY PROVIDED IN THE PROJECT SPECIFICATIONS WITH APPROVAL OF THE CONTRACTING OFFICER.

SDDOT

[HTTP://WWW.SDDOT.COM/OPERATIONS/SPECIFICATIONS/INDEX2004.HTM.](http://www.sddot.com/operations/specifications/index2004.htm)

VA CFM TECHNICAL INFORMATION LIBRARY

[HTTP://WWW.CFM.VA.GOV/TTL/](http://www.cfm.va.gov/ttl/)

OWNER'S REPRESENTATIVE

THROUGHOUT THESE GENERAL NOTES THE CONTRACTING OFFICER IS NAMED AS THE OWNER'S REPRESENTATIVE WITH REGARD TO CONTRACTUAL ITEMS. THE CONTRACTING OFFICER INCLUDES THE CONTRACTING OFFICER'S REPRESENTATIVE (COR), IF THEY ARE RESPONSIBLE FOR THAT ROLE. PLEASE CONTACT THE HOT SPRINGS VA FOR CONFIRMATION ON THE ROLES AND RESPONSIBILITIES OF THE CONTRACTING OFFICER AND THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).

PROJECT INTENT

THIS OVERALL PROJECT CONSISTS OF CONSTRUCTING A NEW STORM SEWER SYSTEM ALONG THE RIVER STREET ENTRANCE. THE EXPECTED REQUIREMENTS FOR THIS PROJECT INCLUDE THE FOLLOWING:

1. REMOVAL AND REPLACEMENT OF THE EXISTING SURFACE IMPROVEMENTS INCLUDING ASPHALT SURFACING, CONCRETE SURFACING, SIDEWALK, CURB AND GUTTER, IRRIGATION AND POWER FOR LIGHTING.
2. THE INSTALLATION OF THE STORM SEWER SYSTEM WHICH INCLUDES 18" HDPE STORM SEWER PIPE, MANHOLES AND INLETS.
3. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE REQUIRED.

UTILITIES

THE INFORMATION ON THESE PLANS CONCERNING THE TYPE, SIZE AND LOCATION OF UTILITIES HAS BEEN SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. THE UTILITY LOCATIONS SHOWN WERE BASED ON FIELD LOCATES AND FROM THE HOT SPRINGS VA'S UTILITY RECORDS. THE EXACT SIZE AND LOCATION OF UNDERGROUND UTILITIES **WAS NOT** VERIFIED BY EXCAVATION. **THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE AND TYPE OF ALL PIPES, CULVERTS, CONDUITS, ETC. THAT ARE BEING REPLACED OR CONNECTED TO PRIOR TO ORDERING ANY NEW MATERIAL.** THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES IN PLACE. CONTRACTOR SHALL COORDINATE ALL RELOCATIONS WITH THE UTILITY COMPANIES AND THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).

THE ALIGNMENT OF POWER MAY BE ADJUSTED OR RELOCATED WITH PRIOR APPROVAL OF THE COR.

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GENERAL SURVEY NOTES

THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS COMPLETED IN JULY 2012. CHANGES IN UTILITIES AND OTHER SITE FEATURES SINCE THE SURVEY MAY HAVE OCCURRED.

DEMOLITION

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD INSPECT AND VERIFY THE PROJECT LIMITS PRIOR TO BIDDING TO DETERMINE SIZE, NUMBER AND LIMITS OF VISIBLE OBSTRUCTIONS WHICH ARE TO BE REMOVED, RELOCATED OR SALVAGED INCLUDING TREES, UTILITIES, ETC.

EQUIPMENT, MATERIALS AND STAGING AREA

A LOCATION HAS BEEN DESIGNATED ON THE PLANS FOR AN EQUIPMENT, MATERIALS STORAGE AND STAGING AREA. THE JOB TRAILER SHALL BE LOCATED IN THIS AREA ALSO. THE CONTRACTOR EMPLOYEE PARKING SHALL BE ADJACENT TO THIS AREA. THE CONTRACTOR IS RESPONSIBLE FOR THE SECURITY AND PROTECTION OF ALL STORED EQUIPMENT AND MATERIALS. TEMPORARY FENCING IS RECOMMENDED. THE CONTRACTOR SHALL ALSO RECLAIM THIS AREA AT THE CONCLUSION OF THE PROJECT. THE CONTRACTOR SHALL ALSO TAKE CARE NOT TO DAMAGE THE PAVEMENT IN THIS AREA. THE CONTRACTOR SHALL REFRAIN FROM UTILIZING EXCESSIVELY LARGE VEHICLES AND EQUIPMENT IN THIS PAVED AREA.

TRAFFIC CONTROL

CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DETOURS AND TRAFFIC CONTROL MEASURES, AS NECESSARY UNLESS APPROVED OTHERWISE BY THE CONTRACTING OFFICER. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE RIVER STREET ENTRANCE MAY BE CLOSED FROM THE PUBLIC DURING CONSTRUCTION ALONG RIVER STREET. THE CONTRACTOR WILL STILL BE REQUIRED TO MAINTAIN THE OUT SIDE LANE FOR THE USE OF EMERGENCY VEHICLES. THIS OUTSIDE LANE SHALL BE SEPARATED FROM ALL ACTIVE CONSTRUCTION OR OPEN TRENCHES BY TRAFFIC CONTROL BARRELS AT ALL TIMES.

THE STAGING AND STORAGE ARE SHALL ALSO BE DELINEATED BY TYPE III BARRICADES AND TRAFFIC CONTROL BARRELS, SEE THE PLANS.

EROSION AND SEDIMENT CONTROL

THE DISTURBANCE DUE TO THIS PROJECT SHOULD BE UNDER ONE ACRE, SO THE CONTRACTOR IS NOT REQUIRED TO OBTAIN COVERAGE UNDER THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (SDDENR) STORM WATER SMALL CONSTRUCTION GENERAL PERMIT. ALTHOUGH THE PERMIT IS NOT REQUIRED, THE CONTRACT IS STILL REQUIRED TO USE BMPS TO MINIMIZE SEDIMENTATION AND EROSION ON THE PROJECT.

THE EROSION CONTROL BMPS SHOWN IN THE PLANS ARE ONLY SUGGESTIONS. THERE ARE MANY BMPS THAT MAY BE UTILIZED. SOME REFERENCES INCLUDE:

[HTTP://CFPUB.EPA.GOV/NPDES/STORMWATER/MENUOFBMPS/HTTP://WWW.METROCOUNCIL.ORG/ENVIRONMENT/WATER/BMP/MANUAL.HTM](http://cfpub.epa.gov/npdes/stormwater/menuofbmpls/http://www.metrocouncil.org/environment/water/bmp/manual.htm)

CONSTRUCTION LIMITS

IN GENERAL, THE CONSTRUCTION LIMITS FOR THIS PROJECT SHALL BE DEFINED AS:

1. A 20' COORIDOR CENTERED ON THE STORM SEWER ALIGNMENT THROUGH THE IRRIGATED TURF AREA.
2. BETWEEN THE BACK OF CURB AND THE TOE OF THE UPHILL SLOPE EXCEPT WHERE ADDITIONAL REMOVAL IS SHOWN ON THE PLANS.

CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE CONSTRUCTION LIMITS DISCUSSED ABOVE UNLESS PRIOR APPROVAL IS RECEIVED FROM THE CONTRACTING OFFICER. USE OF OTHER PROPERTY ON THE CAMPUS OTHER THAN THOSE DESIGNATED FOR STAGING AREAS, MATERIAL STORAGE, SEDIMENTATION PONDS, DEWATERING, OR TOPSOIL STOCKPILING WILL NOT BE ALLOWED. ANY DAMAGE OR RESTORATION OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL TAKE CARE TO PROTECT EXISTING IMPROVEMENTS. ALL EXISTING IMPROVEMENTS DISTURBED WITHIN THE CAMPUS WHETHER NOTED ON THESE PLANS OR NOT, SHALL BE REPLACED IN KIND. ANY COSTS FOR SUCH REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO THIS PROJECT.

CONSTRUCTION FENCING

THE CONTRACTOR SHALL INSTALL A CONSTRUCTION FENCE AROUND ANY OPEN TRENCHES AT THE END OF THE DAY AND ANYTIME THE TRENCH IS LEFT UNATTENDED TO PROVIDE PUBLIC SAFETY. THE CONSTRUCTION FENCE SHALL BE 4' HIGH ORANGE "SNOW FENCE" ATTACHED TO METAL POSTS OR OTHER APPROVED FENCING.

ARCHAEOLOGICAL AND HISTORICAL DISCOVERIES

IF THE CONTRACTOR OR ANY OF THE CONTRACTOR'S EMPLOYEES, PRIOR TO, OR DURING THE CONSTRUCTION WORK, ARE ADVISED OF OR DISCOVER ANY POSSIBLE ARCHAEOLOGICAL, HISTORICAL OR CULTURAL RESOURCES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COR VERBALLY, AND FOLLOW WITH A WRITTEN NOTIFICATION.

DIFFERING SITE CONDITIONS

SHOULD THE CONTRACTOR IDENTIFY SITE OR PROPOSED MATERIAL CONDITIONS WHICH WARRANT A MODIFICATION, A CHANGE IN THE DESIGN MAY BE SUBMITTED TO THE CONTRACTING OFFICER.

IF CONTAMINATED SOILS OR ANY UNUSUAL BURIED DEBRIS ARE ENCOUNTERED DURING EXCAVATION, CONTRACTOR SHALL CEASE WORK AND CONTACT THE CONTRACTING OFFICER.

CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER IF UNSTABLE MATERIAL OR GROUND WATER IS ENCOUNTERED IN AN EXCAVATION WHICH WILL REQUIRE THE CONSTRUCTION TECHNIQUES IN SECTION 31 20 11, EARTH MOVING TO BE MODIFIED. AFTER SUCH NOTIFICATION, CONTRACTOR SHALL AWAIT DIRECTION FROM THE CONTRACTING OFFICER ON ACCEPTABLE CONSTRUCTION TECHNIQUES PRIOR TO RESUMING WORK.

GEOTECHNICAL REPORT AND CONSTRUCTION TESTING

A GEOTECHNICAL INVESTIGATION PREPARED ON AUGUST 29, 2012, WAS PERFORMED BY TERRACON CONSULTANTS, INC. A COPY OF THIS REPORT IS INCLUDED IN THE PROJECT SPECIFICATIONS. THE SUBSURFACE TESTING INCLUDED TEST BORE HOLES AND INTERPRETATION OF RESULTS.

THE INTENT OF THE PROJECT PLANS WAS TO FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT. IF ANY CONFLICTS OR DISCREPANCIES OCCUR, CONTACT THE CONTRACTING OFFICER FOR DIRECTION.

GEOTECHNICAL TESTING WILL BE CONDUCTED DURING THE PROJECT, WITH COORDINATION AMONG THE CONTRACTOR, GEOTECHNICAL FIRM, AND THE CONTRACTING OFFICER. THE OWNER WILL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. IF ANY TEST FAILS, THE MATERIAL WILL BE RE-WORKED OR REPLACED BY THE CONTRACTOR UNTIL A PASSING TEST IS OBTAINED.

THE ENGINEER OF RECORD AND CONTRACTING OFFICER SHALL HAVE ACCESS AT ALL TIMES TO ALL PARTS OF THE PROJECT SITE.

WATER, TELECOMMUNICATIONS AND ELECTRICAL SERVICE FOR CONSTRUCTION

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER FOR COMPACTION OF SCARIFIED MATERIAL, FILL GRANULAR MATERIALS AND TRENCH BACKFILL, AS REQUIRED. THE VA WILL SUPPLY WATER FOR COMPACTION AND DUST CONTROL AT NO CHARGE. THE CONTRACTOR MAY CONNECT TO HYDRANTS WITH THE APPROVAL OF THE CONTRACTING OFFICER. THE CONTRACTOR MUST SUPPLY A DOUBLE CHECK VALVE W/ 1 1/2" CONNECTIONS. THE COSTS FOR LOADING, TRANSPORTING AND APPLYING WATER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ELECTRICITY WILL BE AVAILABLE TO THE CONTRACTOR UP TO 20 AMPS AS DESIGNATED BY THE COR. THE OWNER WILL SUPPLY A QUANTITY THAT IS REASONABLE FOR THE PROJECT. NO METER WILL BE REQUIRED AND THE CONTRACTOR WILL NOT BE CHARGED. COORDINATE THE EXACT LOCATION OF THE CONNECTION WITH THE CONTRACTING OFFICER. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE TEMPORARY CONNECTION AND ANY NECESSARY TRENCHING AND REPAIR OF EXISTING IMPROVEMENTS.

NO TELEPHONE OR INTERNET CONNECTION WILL BE MADE AVAILABLE ON SITE.

CONSTRUCTION SURVEY STAKING

THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHOULD PROTECT ALL CONSTRUCTION STAKES. THE CONTRACTOR SHALL PROVIDE A SOUTH DAKOTA REGISTERED LAND SURVEYOR TO OVERSEE THE STAKING OF THE PROPOSED IMPROVEMENTS.

REMOVALS

ALL CONCRETE AND ASPHALT REMOVAL ITEMS SHALL BE SAW-CUT FULL DEPTH PRIOR TO REMOVAL. USE CARE IN DEMOLITION OPERATIONS ADJACENT TO BUILDINGS AND WHEN CONNECTING TO EXISTING BUILDINGS.

WHEN NEW PAVEMENT IS PLACED ADJACENT TO EXISTING SURFACING, THE MATCH LINE SHALL BE CUT OR SAWED IN THE EXISTING SURFACE TO OBTAIN A VERTICAL, STRAIGHT EDGE.

THE CONTRACTOR WILL BE REQUIRED TO RAZE, REMOVE AND DISPOSE OF ALL STRUCTURES AND OTHER OBSTRUCTIONS OF WHICH ANY PORTION ARE IN THE CONSTRUCTION LIMITS IN ACCORDANCE WITH THE SPECIFICATIONS AND PLANS.

GRADING OPERATIONS

THE CONTRACTOR SHALL BE RESPONSIBLE TO DISPOSE OF ALL ROCKS, RUBBLE, AND EXCESS SOIL. EXCESS SOIL MUST BE REMOVED FROM THE PROPERTY.

THE CONTRACTOR SHALL BE AWARE OF EXISTING DRAINAGE CONDITIONS AND FACILITIES, AND SHALL PROVIDE FOR DRAINAGE AND EROSION CONTROL DURING ALL PHASES OF CONSTRUCTION. DAMAGE CAUSED BY IMPROPER TEMPORARY DRAINAGE FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CONTRACTING OFFICER.

SALVAGE AND PLACE TOPSOIL

TOPSOIL WITHIN THE CONSTRUCTION LIMITS SHALL BE STRIPPED AND A SUFFICIENT QUANTITY STOCKPILED ON THE SITE TO COMPLETE THE PROJECT. EXCESS TOPSOIL MUST BE REMOVED FROM THE PROPERTY. STOCKPILED TOPSOIL SHALL BE TEMPORARILY SEEDED IN COMPLIANCE WITH EROSION CONTROL PLAN REQUIREMENTS. ALL TRANSPORTATION, LOADING AND UNLOADING AND TEMPORARY DRAINAGE DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY.

FOLLOWING INSTALLATION OF THE UTILITIES, THE SALVAGED TOPSOIL SHALL BE SPREAD EVENLY AT A MINIMUM OF FOUR (4) INCHES FINISHED DEPTH OVER THE DISTURBED AREAS WITHIN THE WORK LIMITS. RESTORATION OF DISTURBED AREAS CREATED DURING CONSTRUCTION OUTSIDE OF THE CONSTRUCTION LIMITS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRENCHING AND SHORING

THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL EXCAVATION, TRENCHING AND SHORING, AND THE LIKE SHALL BE PERFORMED IN A MANNER THAT COMPLIES WITH OSHA, DEPARTMENT OF LABOR, AND SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION AND STANDARD SPECIFICATIONS. DUE TO THE LIMITED WORK AREA A TRENCH BOX IS RECOMMENDED.

THE CONTRACTOR IS REQUIRED TO SUPPORT ALL LUMINAIRE POLES WHILE EXCAVATING AND BACKFILLING ADJACENT TO THEM. THIS ITEM OF WORK IS INCIDENTAL TO THE INSTALLATION OF MANHOLES, INLETS OR STORM SEWER.

THE MANHOLE LOCATED AT STATION 3+99 IS IMMEDIATELY ADJACENT TO A STRUCTURE. THIS STRUCTURE SHALL BE SUPPORTED TO PREVENT DAMAGE WHILE EXCAVATING AND BACKFILLING.

DEWATERING

IF WATER FROM TEMPORARY DE-WATERING WILL BE DISCHARGED TO WATERS OF THE STATE DURING CONSTRUCTION, CONTRACTOR MUST FIRST GET COVERAGE UNDER THE STATE DEPARTMENT'S GENERAL PERMIT FOR TEMPORARY DE-WATERING. FOR MORE INFORMATION CONTACT SDDENR AT (605) 773-3351.

WATER FROM DEWATERING OR OTHER USES WILL NOT BE ALLOWED TO REACH NAVIGABLE WATER(S) AS DEFINED BY SDDENR. THE WATER MAY BE USED AS IRRIGATION AND COORDINATED WITH THE CONTRACTING OFFICER. IF LAND APPLYING CONSTRUCTION SITE WATER TO THE LAND SURFACE, DO IT SO THAT IT WILL NOT RUN OFF TO SURFACE WATER. CONTACT THE SDDENR TO DETERMINE IF A "LAND APPLICATION" PERMIT IS REQUIRED.

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HOT SPRINGS, SOUTH DAKOTA

REVISIONS:

Project Number: 568-13-202  
Date: 10/10/12

GENERAL  
NOTES

G1.02



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STORM SEWER

PIPE DEFLECTION IN THE HDPE STORM SEWER SHALL NOT EXCEED THE MINIMUM ALLOWABLE RADIUS OF CURVATURE AS RECOMMENDED BY THE PIPE MANUFACTURER. STATION AND ELEVATION INFORMATION FOR THE PROPOSED STORM SEWER IS INCLUDED ON THE PROFILES WITHIN THIS PLAN SET FOR INFORMATIONAL PURPOSES. THE PROPOSED STORM SEWER SHALL BE INSTALLED TO THE LINES AND GRADES SHOWN ON THE PLANS. CHANGES IN HORIZONTAL AND VERTICAL ALIGNMENT SHALL BE APPROVED BY THE CONTRACTING OFFICER AND MADE WITHIN THE PIPE OR FITTING MANUFACTURER'S RECOMMENDED TOLERANCES. ALLOWABLE DEFLECTION PARAMETERS SHALL BE INCLUDED IN THE PIPE SUBMITTAL AND SHALL BE CLEARLY MARKED.

WHERE INDICATED ON PLANS OR REQUIRED BY THE PROJECT SPECIFICATIONS, PIPE OR FITTINGS SHALL BE ENCASED WITH FLOWABLE FILL. ENCASEMENT SHALL COMPLETELY SURROUND THE PIPE SO AS TO FULLY ENCASE THE PIPE AND SHALL BE CONSTRUCTED AS SHOWN IN THE DETAILS.

EXISTING UTILITY CROSSINGS

AT ALL LOCATIONS WHERE THE PROPOSED UTILITY IMPROVEMENT CROSSES OR IS ADJACENT TO EXISTING UTILITIES THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAFEGUARDING THE EXISTING UTILITY TO ENSURE THAT IT IS NOT DISTURBED DURING THE WORK. TEMPORARY STRUCTURAL SUPPORT FOR THE UTILITIES MAY BE REQUIRED. ANY REPAIR WORK NECESSARY TO A CROSSED UTILITY RESULTING FROM THE CONTRACTOR'S ACTIVITY SHALL BE AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITIES AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION OPERATIONS. ANY DISRUPTION IN SERVICE SHALL BE COORDINATED WITH THE CONTRACTING OFFICER. THE CONTRACTOR SHALL PROVIDE A METHOD OF TEMPORARY SERVICE DURING PERIODS OF DISRUPTION.

THE CONTRACTOR MAY USE FLOWABLE FILL AT THE CONTRACTING OFFICER'S DISCRETION.

ASPHALT CONCRETE PAVEMENT

COMPACTION OF ASPHALT CONCRETE SHALL BE BY THE SPECIFIED DENSITY METHOD. THE MINIMUM DENSITY REQUIREMENT SHALL BE BASED ON THE GEOTECHNICAL REQUIREMENTS FOR THIS PROJECT. IF THE AVERAGE FIELD DENSITY FAILS TO MEET THE SPECIFICATIONS LISTED ABOVE, THE CONTRACTOR SHALL REMOVE AND REPLACE THE WORK.

ASPHALT CONCRETE COMPOSITE SHALL BE FURNISHED, INSTALLED, AND TESTED IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND SUPPLEMENTED BY THE SDDOT APPLICABLE SECTIONS. THE ASPHALT CEMENT USED IN THE MIXTURE SHALL BE SDDOT TYPE E, PERFORMANCE GRADED PG 64-22.

AS PART OF THE SUBMITTAL REVIEW PROCESS THE CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION FROM THE PRODUCER STATING THAT THE ASPHALT CONCRETE CONFORMS TO THE SPECIFICATIONS AND THE JOB MIX FORMULA, A CERTIFICATE OF COMPLIANCE FROM THE REFINERY FOR THE ASPHALT CEMENT USED IN THE MIXTURE AND A SCALE CERTIFICATION SHALL BE SUBMITTED AND APPROVED BY THE CONTRACTING OFFICER. THE CONTRACTING OFFICER MAY ACCEPT THE MIXTURE ON THE BASIS OF CERTIFICATE OF COMPLIANCE AND VISUAL INSPECTION OR MAY TEST THE MIXTURE FOR SPECIFICATION COMPLIANCE.

TACK COAT (SS-1H OR CSS-1H) SHALL BE APPLIED BETWEEN EACH LIFT OF ASPHALT, ON MILLED SURFACES, AND ALONG EXISTING CONCRETE AND ASPHALT FACES AND ANY AREAS AS DETERMINED BY THE CONTRACTING OFFICER AT A RATE OF 0.05 GALLONS PER SQUARE YARD.

SITE CLEAN-UP

ALL PAVED ROADS ADJACENT TO PROJECT AREAS SHALL BE CLEANED OF CONSTRUCTION DEBRIS AT THE END OF EACH DAY OR MORE FREQUENTLY, IF NEEDED. SEDIMENT AND MILLINGS SHALL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.

AS-BUILTS

THE CONTRACTOR SHALL MEASURE AND RECORD ANY HORIZONTAL OR VERTICAL DEVIATIONS FROM THE CONTRACT DRAWINGS. THE CHANGES SHALL BE RECORDED IN AN ACCURATE, NEAT FASHION ON FULL SCALE DRAWINGS AND FURNISHED TO THE CONTRACTING OFFICER WITHIN 14 DAYS OF COMPLETION OF THE PROJECT. SPECIFICALLY, ALL SERVICE TAPS, CONNECTIONS, AND BURIED FITTINGS SHALL BE RECORDED FOR THE WORK. THE AS-BUILT DRAWINGS SHALL BE ON-SITE AND AVAILABLE FOR REVIEW BY THE ENGINEER OF RECORD OR CONTRACTING OFFICER UPON REQUEST.

IRRIGATION

THE CONTRACTOR SHALL VERIFY AND DOCUMENT THE LOCATION OF ALL MAINS, LATERALS, VALVE BOXES AND IRRIGATION HEADS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT THE EXISTING IRRIGATION SYSTEM AND REPAIR ANY PARTS OF THE SYSTEM THAT ARE DAMAGED DUE TO CONSTRUCTION. THE CONTRACTOR SHALL SALVAGE AND REPLACE THE EXISTING HEADS, AS NECESSARY. THE SALVAGED HEADS SHALL BE REPLACED IN THE SAME LOCATION. ALL REPAIRS OF THE LATERALS, MAINS, CONTROL WIRES, TRACER WIRE AND CONDUIT SHALL BE OF SIMILAR MATERIAL AND EQUAL OR BETTER CONDITION THAN THE EXISTING SYSTEM. THE CONTRACTOR SHALL ENSURE THAT AT COMPLETION OF REPAIRS, THE IRRIGATION SYSTEM PROVIDES COVERAGE GREATER THAN OR EQUAL TO THAT PRIOR TO CONSTRUCTION.

TREES

THE CONTRACTOR SHALL REMOVE AND RELOCATE TREES WITH AN APPROVED MECHANICAL TREE SPADE. THE TREE SPADE SHALL BE APPROVED BY THE CONTRACTING OFFICER PRIOR TO USE.

ALL TREES TRANSPLANTED SHALL BE PLANTED AT A LOCATION APPROVED BY THE CONTRACTING OFFICER IN THE MANNER SHOWN IN THE PLANS AND IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE SPECIFICATIONS.

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HOT SPRINGS, SOUTH DAKOTA

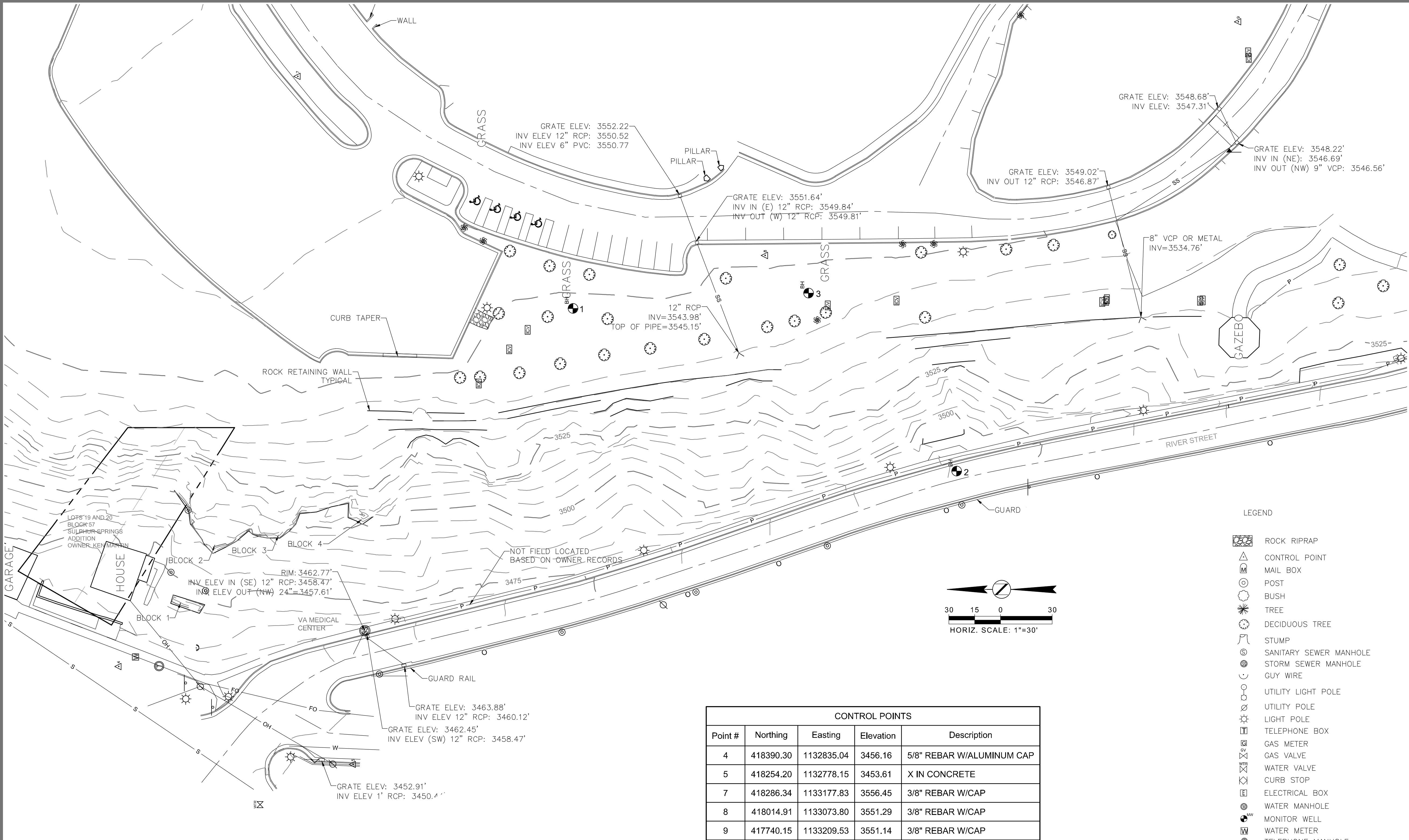
REVISIONS:

Project Number: 568-13-202  
Date: 10/10/12

GENERAL  
NOTES

G1.03

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1. THE COORDINATE SYSTEM USED FOR THIS SURVEY IS US SOUTH DAKOTA STATE PLANE COORDINATES, SOUTH ZONE NAD 83/96. VERTICAL DATUM IS NAVD88 (GEOID 09).
2. THE UTILITY LOCATIONS SHOWN WERE BASED ON FIELD LOCATES PROVIDED BY THE UTILITY COMPANIES (THROUGH ONE-CALL) AND THE OWNER. THE SIZE AND LOCATION OF UNDERGROUND UTILITIES WAS NOT VERIFIED BY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING, PROTECTING AND VERIFYING ALL UTILITIES DURING CONSTRUCTION AND PRIOR TO ORDERING MATERIALS.
3. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS COMPLETED JULY, 2012. CHANGES IN UTILITIES AND OTHER SITE FEATURES SINCE THE SURVEY MAY HAVE OCCURRED AND WOULD NOT BE SHOWN ON THIS SITE SURVEY.
4. ONLY IRRIGATION/SPRINKLER HEADS THAT WERE VISIBLE DURING THE TOPOGRAPHIC ARE SHOWN.

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TOPOGRAPHIC  
SURVEY  
V1.01

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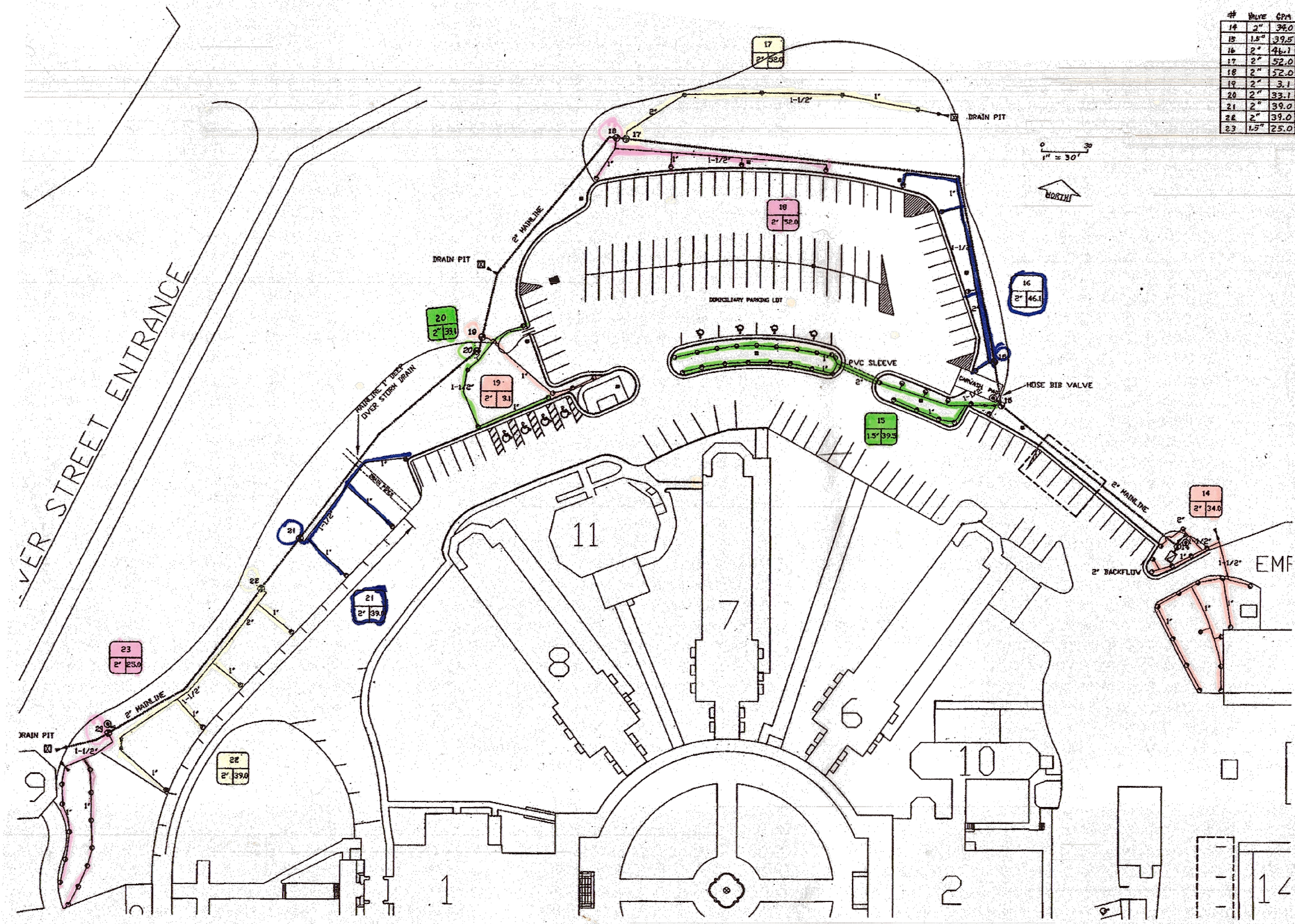
GENERAL NOTES:

1. THE IRRIGATION MAPS SHOWN ON V1.02 AND V1.03 WERE PROVIDED BY THE OWNER TO ASSIST THE CONTRACTOR IN THE PREPARATION OF THEIR BIDS. THE INFORMATION ON THE MAP WAS NOT VERIFIED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL INFORMATION ON THE MAP. THE ORIGINAL MAP IS AVAILABLE FOR REVIEW - CONTACT THE COR.
2. THE CONTRACTOR SHALL FIELD LOCATE THE EXISTING IRRIGATION HEADS, VALVE VAULTS AND AUTOMATIC DRAIN VALVES PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL RELOCATE OR REPLACE IRRIGATION HEADS AND DRAIN VALVES AS NECESSARY TO PROVIDE HEAD TO HEAD COVERAGE.
4. ALL DAMAGE TO THE IRRIGATION SYSTEM SHALL BE REPAIRED WITH THE SAME SIZE, MATERIAL AND/OR MODEL NUMBER.
5. THE CONTRACTOR SHALL PROVIDE A SUBMITTAL SHOWING THE PROPOSED LAYOUT AND REVISIONS FOR REVIEW PRIOR TO INSTALLATION.
6. FLUSH AND TEST THE ENTIRE IRRIGATION SYSTEM AT PROJECT COMPLETION.

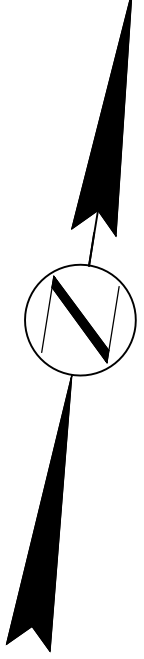
IRRIGATION MATERIAL LEGEND		
1	RAIN SWITCH / BYPASS	1000 850-74
2	HOSE BIB VALVE	1000 850-74
3	FIXED SPRAY SPRINKLER-30 ARC	1000 3702-20 0X #
4	FIXED SPRAY SPRINKLER-120 ARC	1000 3702-20 10 #
5	FIXED SPRAY SPRINKLER-180 ARC	1000 3702-20 10 #
6	FIXED SPRAY SPRINKLER-270 ARC	1000 3702-20 10 #
7	FIXED SPRAY SPRINKLER-360 ARC	1000 3702-20 10 #
8	FIXED SPRAY SPRINKLER-30 ARC	1000 3702-20 10 #
9	FIXED SPRAY SPRINKLER-120 ARC	1000 3702-20 10 #
10	FIXED SPRAY SPRINKLER-180 ARC	1000 3702-20 10 #
11	FIXED SPRAY SPRINKLER-270 ARC	1000 3702-20 10 #
12	FIXED SPRAY SPRINKLER-360 ARC	1000 3702-20 10 #
13	BEAR DRIVEN SPRINKLER-30 ARC	1000 8001 10
14	BEAR DRIVEN SPRINKLER-120 ARC	1000 8001 10
15	BEAR DRIVEN SPRINKLER-180 ARC	1000 8001 10
16	BEAR DRIVEN SPRINKLER-270 ARC	1000 8001 10
17	BEAR DRIVEN SPRINKLER-360 ARC	1000 8001 10
18	QUICK DRAINING VALVE	1000 474-03
19	DRAIN VALVE - 1" - 1/2"	1000 474-03
20	DRAIN PIT	1000 474-03
21	EXISTING MAIN LINE C.I. PIPE	EXISTING
22	EXISTING MAIN LINE C.I. PIPE	EAGLE GLASS 200 PVC
23	EXISTING MAIN LINE C.I. PIPE	EAGLE GLASS 200 PVC
24	EXISTING MAIN LINE C.I. PIPE	EAGLE SCH 40 PVC

\* AS NOTED ON DRAWING  
\*\* SLEEVE SIZE TO BE 2 TIMES PIPE SIZE  
\*\*\* 1" UNLESS OTHERWISE NOTED

#	VALVE	GPM	COLOR CODE
14	2"	34.0	
15	1.5"	39.5	
16	2"	46.1	
17	2"	52.0	
18	2"	52.0	
19	2"	3.1	
20	2"	33.1	
21	2"	39.0	
22	2"	39.0	
23	1.5"	25.0	



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HOT SPRINGS, SOUTH DAKOTA

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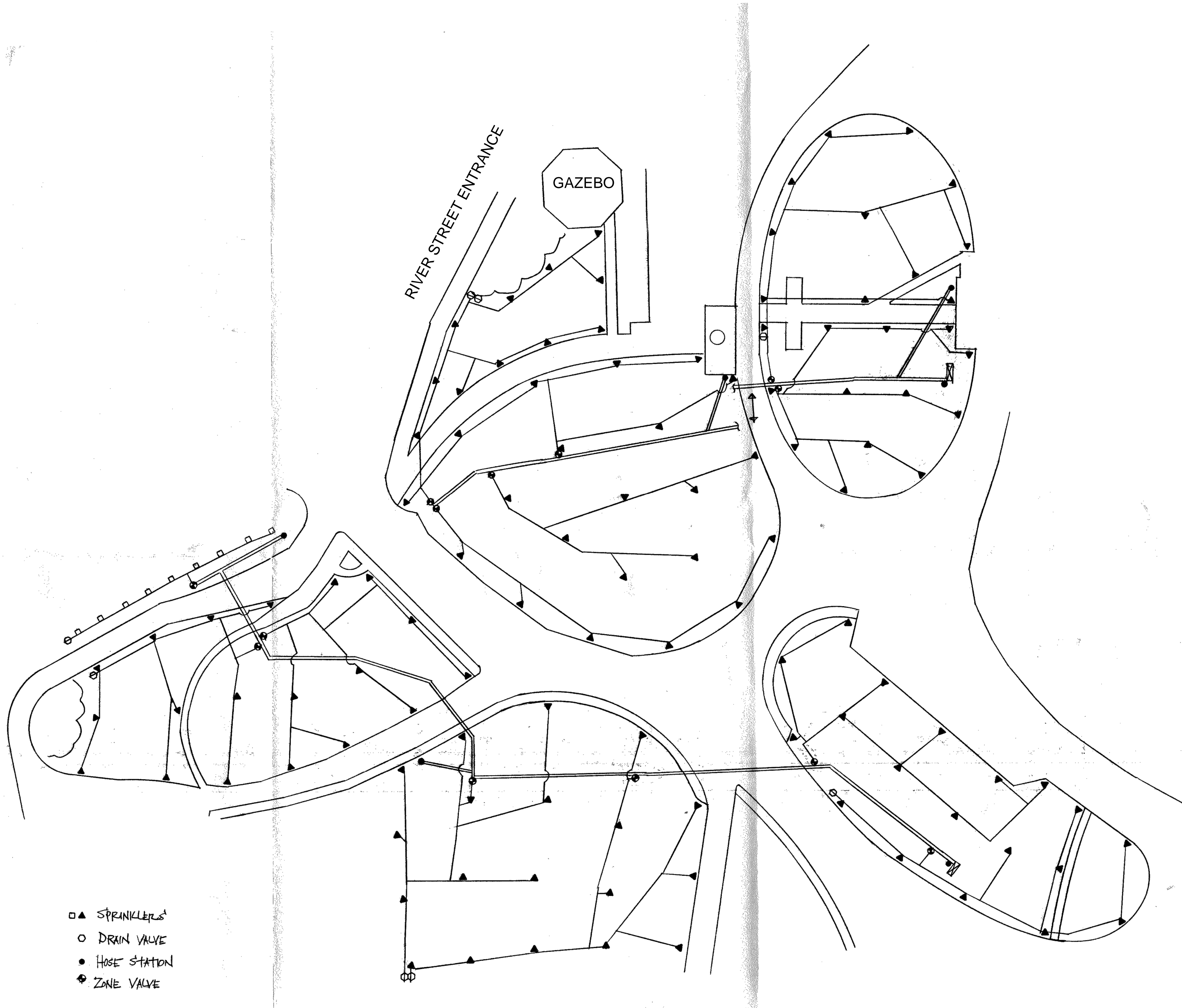
Project Number: 568-13-202  
Date: 10/10/12

IRRIGATION  
MAP

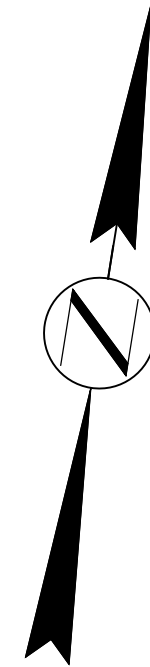
V1.02



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- ▲ SPRINKLERS
- DRAIN VALVE
- HOSE STATION
- ◆ ZONE VALVE



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Project Number: 568-13-202

Date: 10/10/12

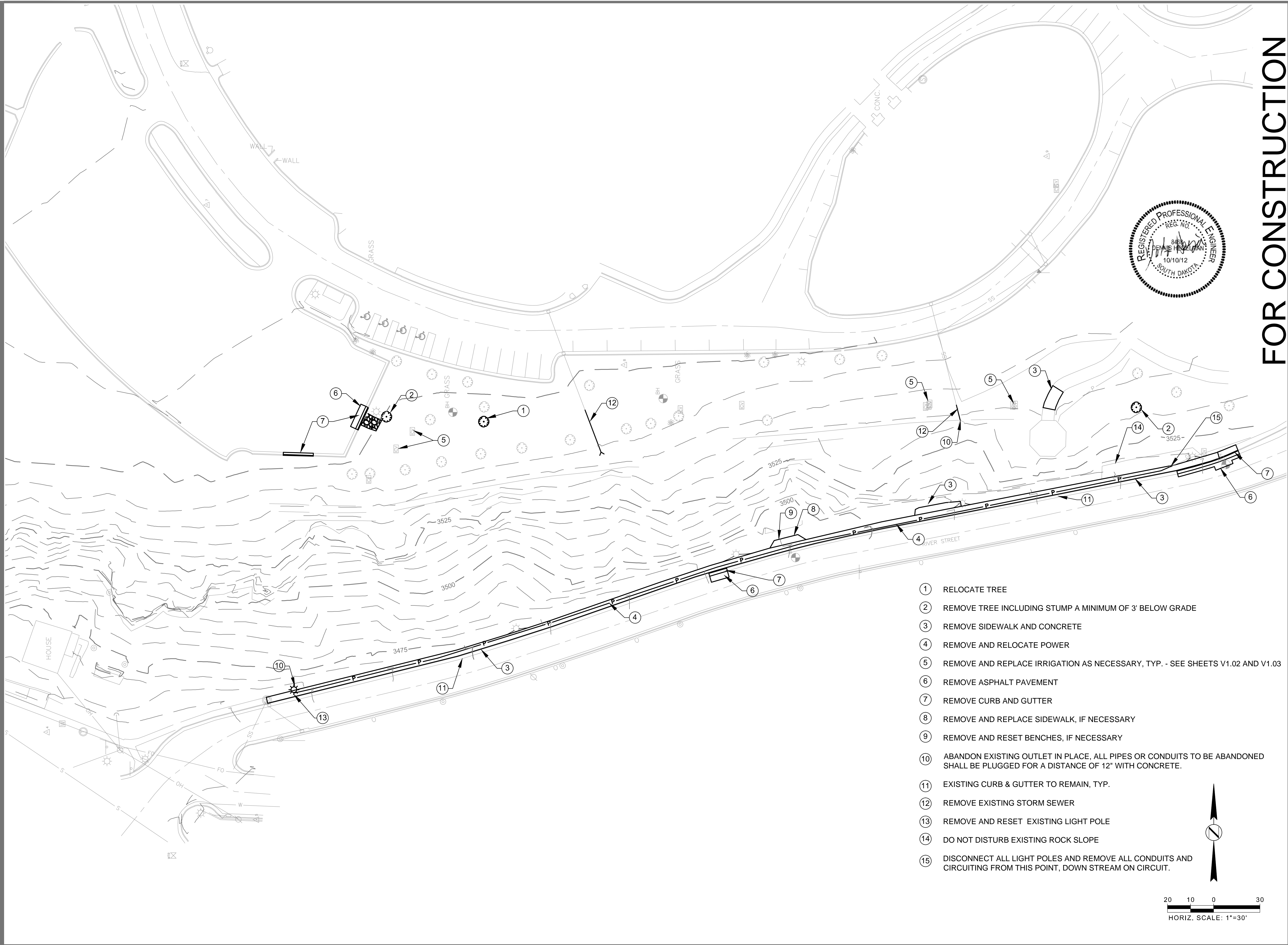
IRRIGATION  
MAP

V1.03

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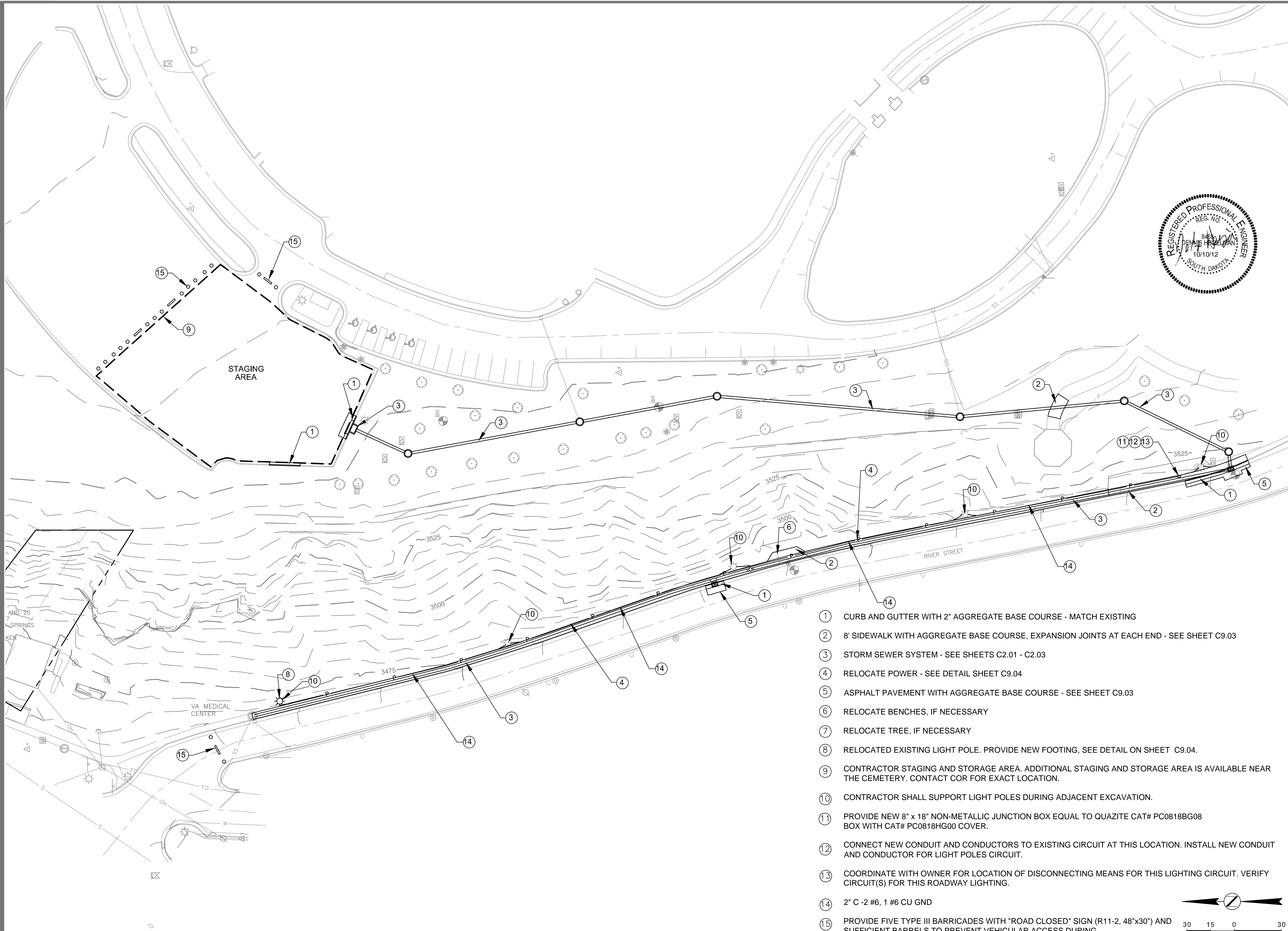
DEMOLITION  
PLAN

D1.01

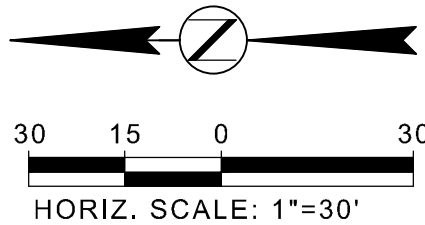
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- ① CURB AND GUTTER WITH 2" AGGREGATE BASE COURSE - MATCH EXISTING
- ② 8' SIDEWALK WITH AGGREGATE BASE COURSE, EXPANSION JOINTS AT EACH END - SEE SHEET C9.03
- ③ STORM SEWER SYSTEM - SEE SHEETS C2.01 - C2.03
- ④ RELOCATE POWER - SEE DETAIL SHEET C9.04
- ⑤ ASPHALT PAVEMENT WITH AGGREGATE BASE COURSE - SEE SHEET C9.03
- ⑥ RELOCATE BENCHES, IF NECESSARY
- ⑦ RELOCATE TREE, IF NECESSARY
- ⑧ RELOCATED EXISTING LIGHT POLE. PROVIDE NEW FOOTING, SEE DETAIL ON SHEET C9.04.
- ⑨ CONTRACTOR STAGING AND STORAGE AREA. ADDITIONAL STAGING AND STORAGE AREA IS AVAILABLE NEAR THE CEMETERY. CONTACT COR FOR EXACT LOCATION.
- ⑩ CONTRACTOR SHALL SUPPORT LIGHT POLES DURING ADJACENT EXCAVATION.
- ⑪ PROVIDE NEW 8" x 18" NON-METALLIC JUNCTION BOX EQUAL TO QUAZITE CAT# PC0818BG08 BOX WITH CAT# PC0818HG00 COVER.
- ⑫ CONNECT NEW CONDUIT AND CONDUCTORS TO EXISTING CIRCUIT AT THIS LOCATION. INSTALL NEW CONDUIT AND CONDUCTOR FOR LIGHT POLES CIRCUIT.
- ⑬ COORDINATE WITH OWNER FOR LOCATION OF DISCONNECTING MEANS FOR THIS LIGHTING CIRCUIT. VERIFY CIRCUIT(S) FOR THIS ROADWAY LIGHTING.
- ⑭ 2" C -2 #6, 1 #6 CU GND
- ⑮ PROVIDE FIVE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN (R11-2, 48"x30") AND SUFFICIENT BARRELS TO PREVENT VEHICULAR ACCESS DURING CONSTRUCTION (6' SPACING).



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SITE  
PLAN

C1.01



EROSION CONTROL / STORM WATER POLLUTION CONTROL

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DEVELOPMENT, PROCUREMENT, AND IMPLEMENTATION OF A SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (SD DENR) "STORMWATER PERMIT". THE CONTRACTOR SHALL CONTACT SDDENR (605) 773-3351 TO DETERMINE THE REQUIREMENTS FOR THIS PROJECT. IF THE PROJECT DISTURBANCE LIMITS WILL EXCEED ONE ACRE. IT IS ESTIMATED THAT THE PROJECT WILL NOT EXCEED ONE ACRE AND THUS A "STORM WATER PERMIT" SHOULD NOT BE REQUIRED. IF REQUIRED, THE CONTRACTOR SHALL FURNISH TO THE COR THE POLLUTION PREVENTION PLAN SEVEN (7) DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING.

THE CONTRACTOR SHALL NOT BEGIN ANY SURFACE REMOVAL OR EXCAVATION UNTIL EROSION CONTROL MEASURES ARE IN PLACE FOR THE PHASE OF WORK BEING COMPLETED. EROSION CONTROL MEASURES SHALL PROCEED IN AN ORDERLY AND PROGRESSIVE MANNER AHEAD OF EXCAVATION WORK.

THE CONTRACTOR IS ADVISED THAT SEVERAL AGENCIES INCLUDING THE OWNER HAVE THE AUTHORITY TO "STOP WORK" IF THE POLLUTION PREVENTION CONTROL IS NOT IMPLEMENTED OR IS NOT EFFECTIVE IN THE PREVENTION OF ENVIRONMENTAL DAMAGE FROM CONSTRUCTION ACTIVITIES. NO COMPENSATION WILL BE FORTHCOMING FOR "LOST TIME" DUE TO A "STOP WORK" ORDER

EROSION CONTROL MEASURES SUCH AS SILT FENCE, RIPRAP, EROSION CONTROL BLANKETS AND WATTLES SHOWN ON THE PLANS, WILL BE PAID FOR UNDER THE APPLICABLE UNIT PRICES BID IN THE SCHEDULE. LOCATIONS FOR THE EROSION CONTROL MEASURES ARE RECOMMENDED ON THE PLANS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE DEVICES AND LOCATIONS NECESSARY FOR EFFECTIVE POLLUTION CONTROL IN ACCORDANCE WITH STATE AND FEDERAL POLLUTION CONTROL REQUIREMENTS.

ALL STORM DRAIN INLETS SHALL BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED.

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

THE CONTRACTOR WILL BE REQUIRED TO FIND AN APPROPRIATE LOCATION FOR CONCRETE WASHOUT. THE LOCATION WILL REQUIRE APPROPRIATE CONTAINMENT FOR THE WASHOUT OPERATIONS AND THE COR WILL APPROVE OF THE SITE BEFORE IT MAY BE USED.

THE CONTRACTOR, AND / OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHT OF WAYS.

INSPECTION AND MAINTENANCE

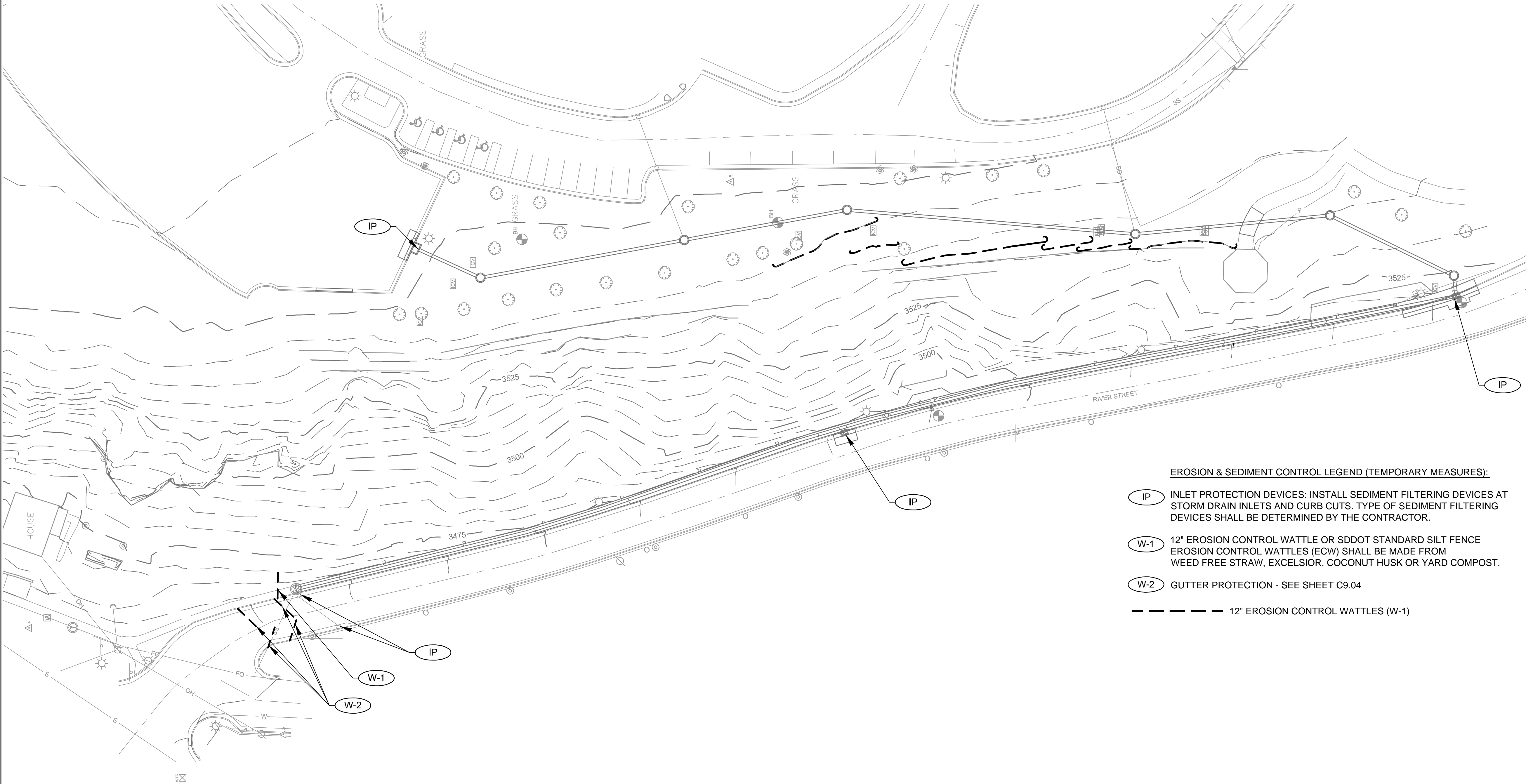
THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL AND WATER POLLUTION CONTROL DEVICES ONCE A WEEK AND WITHIN 24 HOURS OF EVERY RAINFALL GREATER THAN 1/2 INCH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE, TO INCLUDE BUT NOT BE LIMITED TO: REPAIR, RESET, MUCKING, REPLACEMENT, OF ALL TEMPORARY EROSION CONTROL AND WATER POLLUTION CONTROL DEVICES UNTIL PERMANENT EROSION CONTROL IS ESTABLISHED AND THE PROJECT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE OF EROSION CONTROL AND WATER POLLUTION CONTROL DEVICES SHALL BE INCIDENTAL AND CONSIDERED PART OF THE UNIT OR LUMP SUM COST.

CONSTRUCTION ENTRANCES AND EXITS MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL OFF-SITE ROADS, WITHIN 24 HOURS OF DISCOVERY. CONSTRUCTION SITE VEHICLE EXIT LOCATIONS SHALL BE RELOCATED AS NECESSARY DEPENDENT UPON PHASING.

ALL SILT FENCES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/3 OF THE HEIGHT OF THE FENCE. THESE REPAIRS MUST BE MADE WITHIN 24 HOUR OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

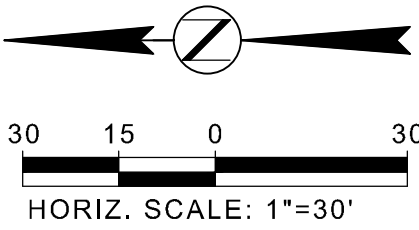
TEMPORARY DRAINAGE DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY. CONTRACTOR SHALL BE AWARE OF EXISTING DRAINAGE CONDITIONS AND FACILITIES, AND SHALL PROVIDE FOR DRAINAGE AND EROSION CONTROL DURING ALL PHASES OF CONSTRUCTION. DAMAGE CAUSED BY IMPROPER TEMPORARY DRAINAGE FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE COR.

DO NOT REMOVE TEMPORARY EROSION CONTROL MEASURES (SILT FENCING AND WATTLES) UNTIL ALL DISTURBED AREAS HAVE BEEN SEEDED.



EROSION & SEDIMENT CONTROL LEGEND (TEMPORARY MEASURES):

- IP INLET PROTECTION DEVICES: INSTALL SEDIMENT FILTERING DEVICES AT STORM DRAIN INLETS AND CURB CUTS. TYPE OF SEDIMENT FILTERING DEVICES SHALL BE DETERMINED BY THE CONTRACTOR.
- W-1 12" EROSION CONTROL WATTLE OR SDDOT STANDARD SILT FENCE  
EROSION CONTROL WATTLES (ECW) SHALL BE MADE FROM WEED FREE STRAW, EXCELSIOR, COCONUT HUSK OR YARD COMPOST.
- W-2 GUTTER PROTECTION - SEE SHEET C9.04
- 12" EROSION CONTROL WATTLES (W-1)



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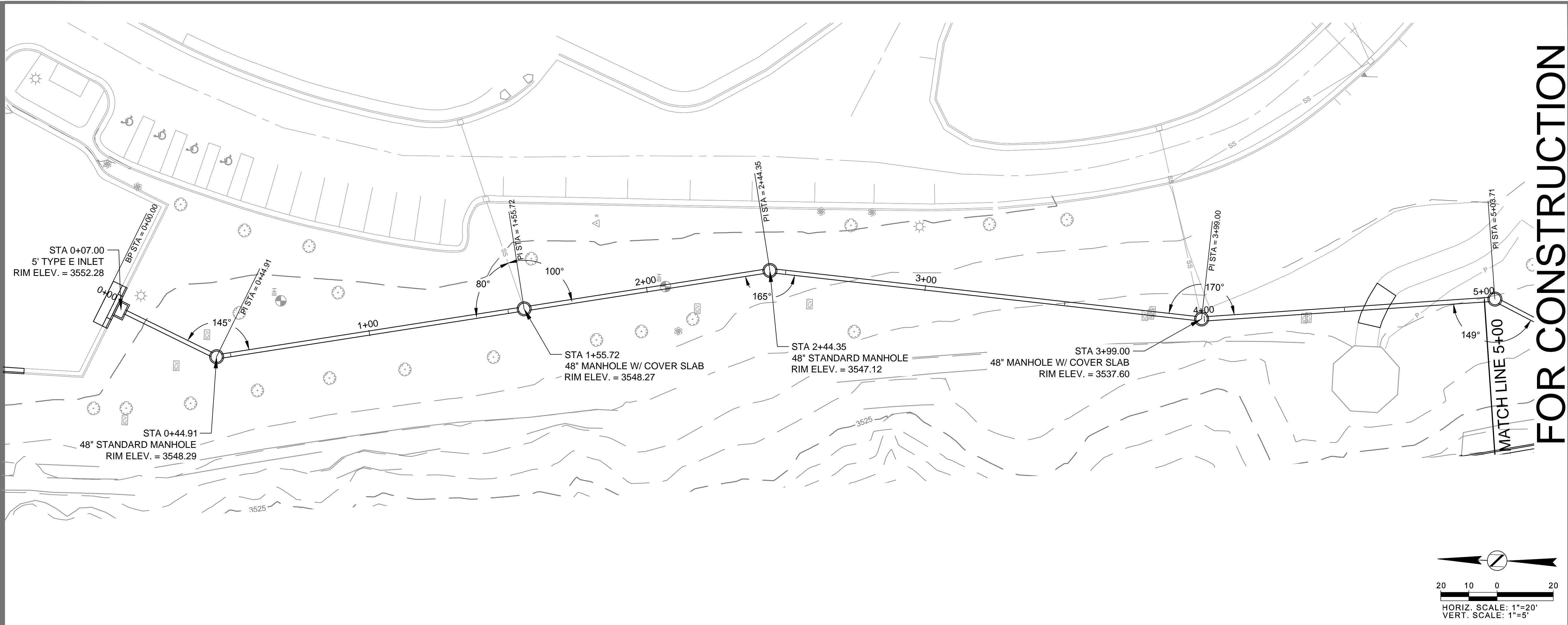
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EROSION  
CONTROL

C1.02



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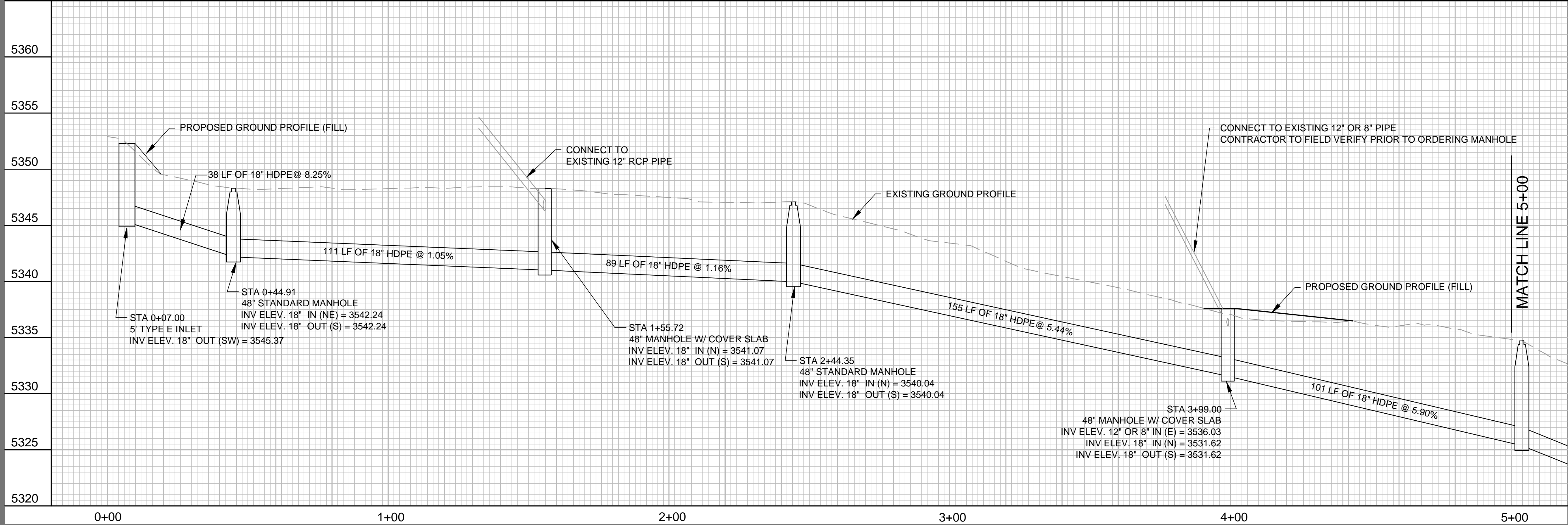
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STORM SEWER  
PLAN AND PROFILE  
STA 0+00 TO 5+00

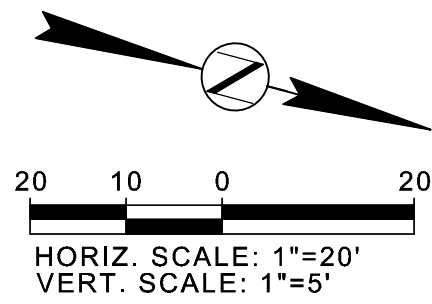
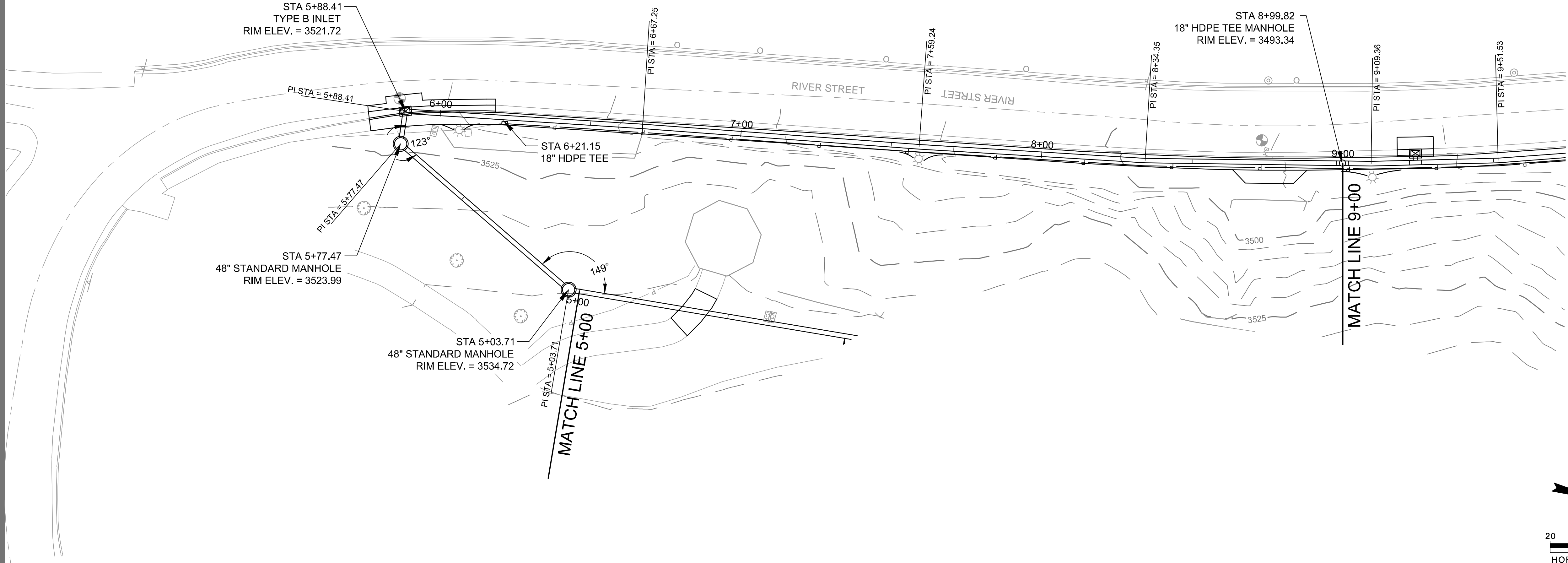
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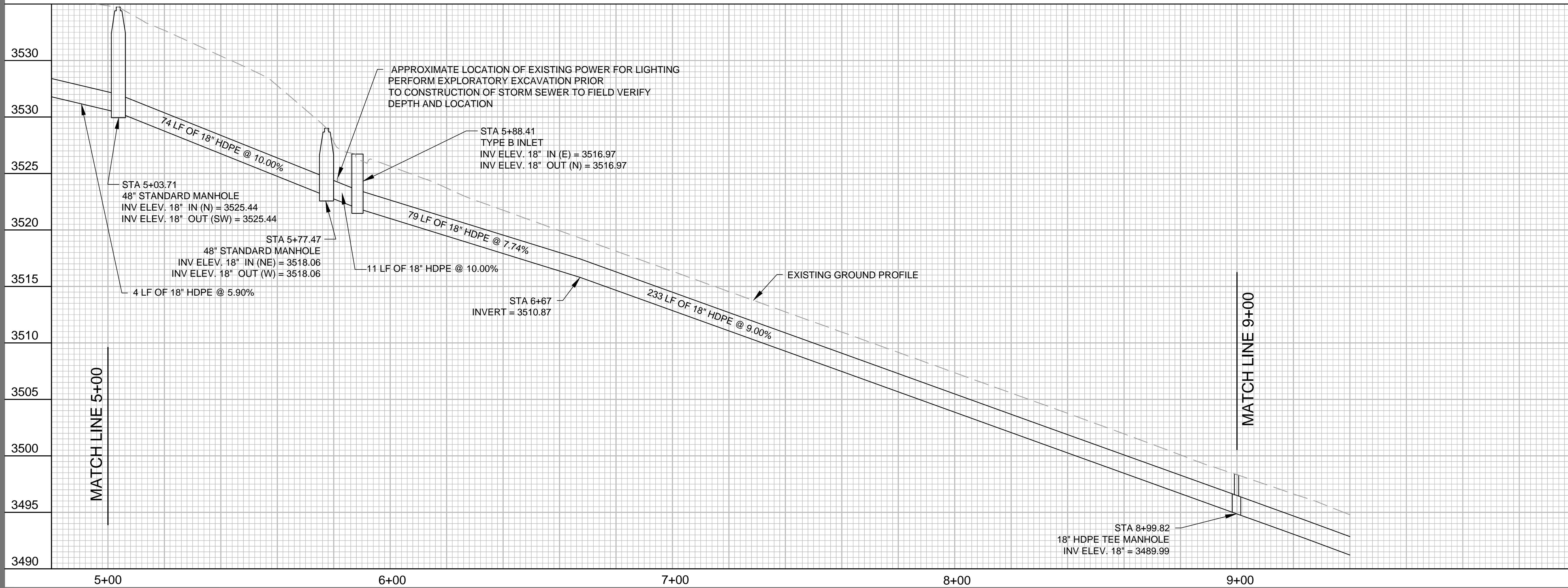
Project Number: 568-13-202

Date: 10/10/12

STORM SEWER  
PLAN AND PROFILE  
STA 5+00 TO 9+00

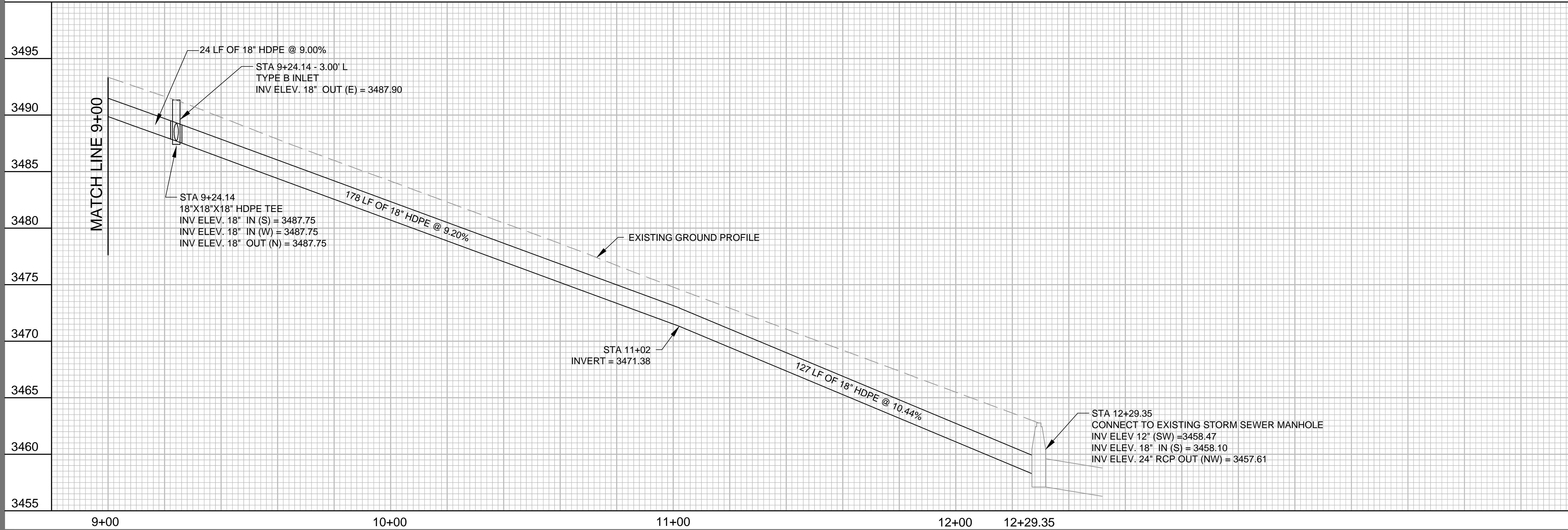
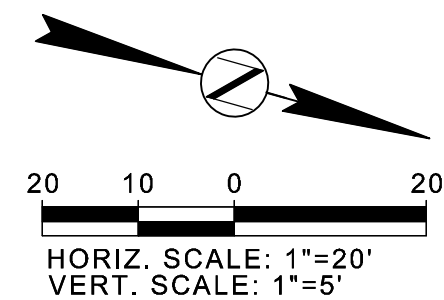
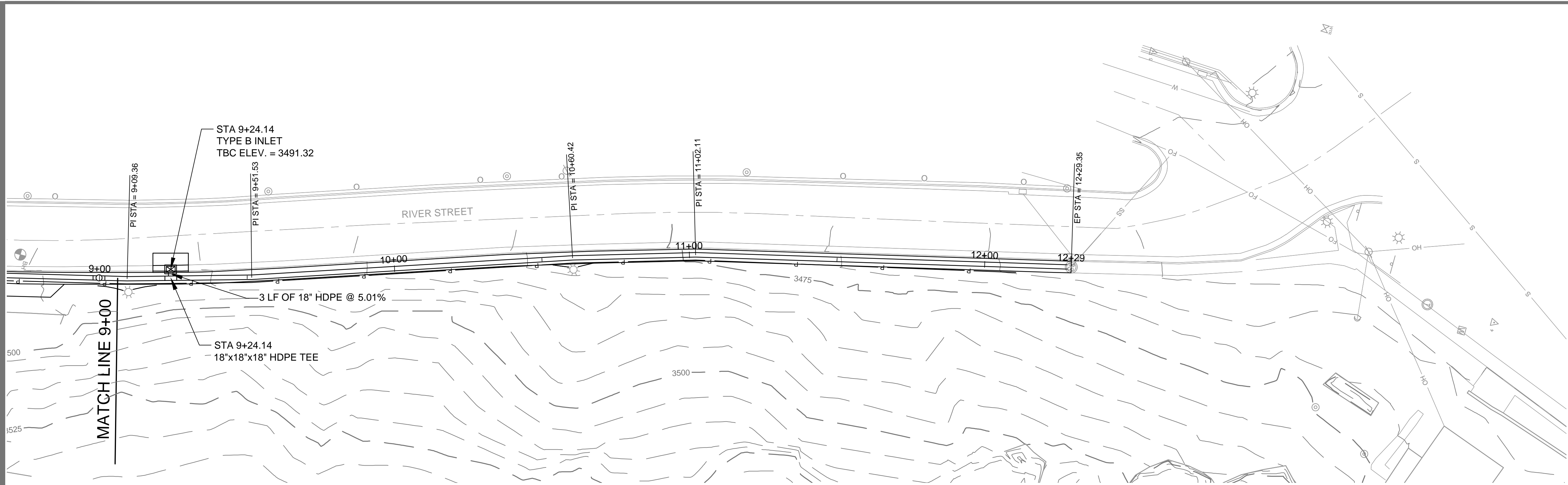
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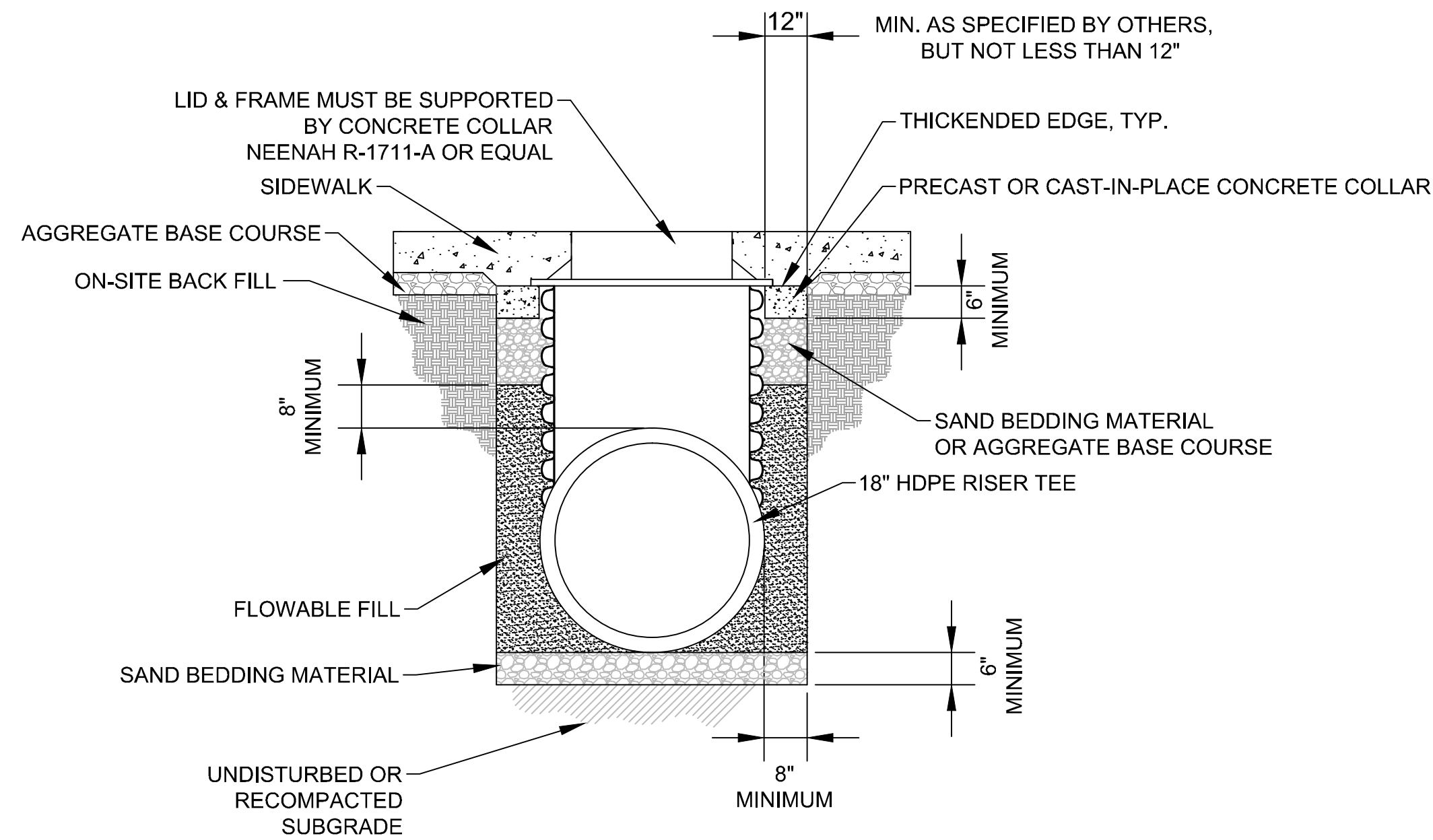
STORM SEWER  
PLAN AND PROFILE  
STA 9+00 TO 12+29.35

C2.03

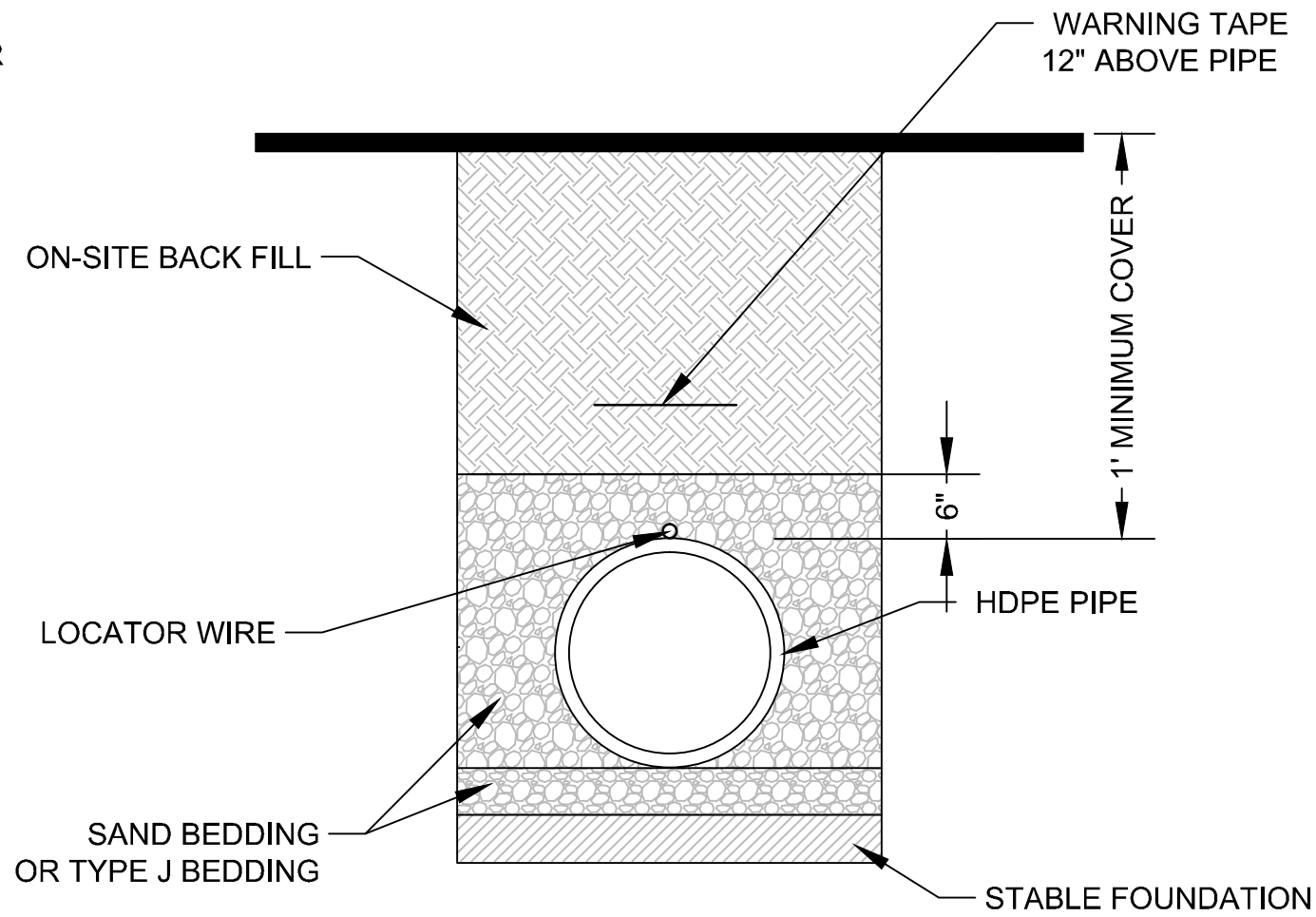
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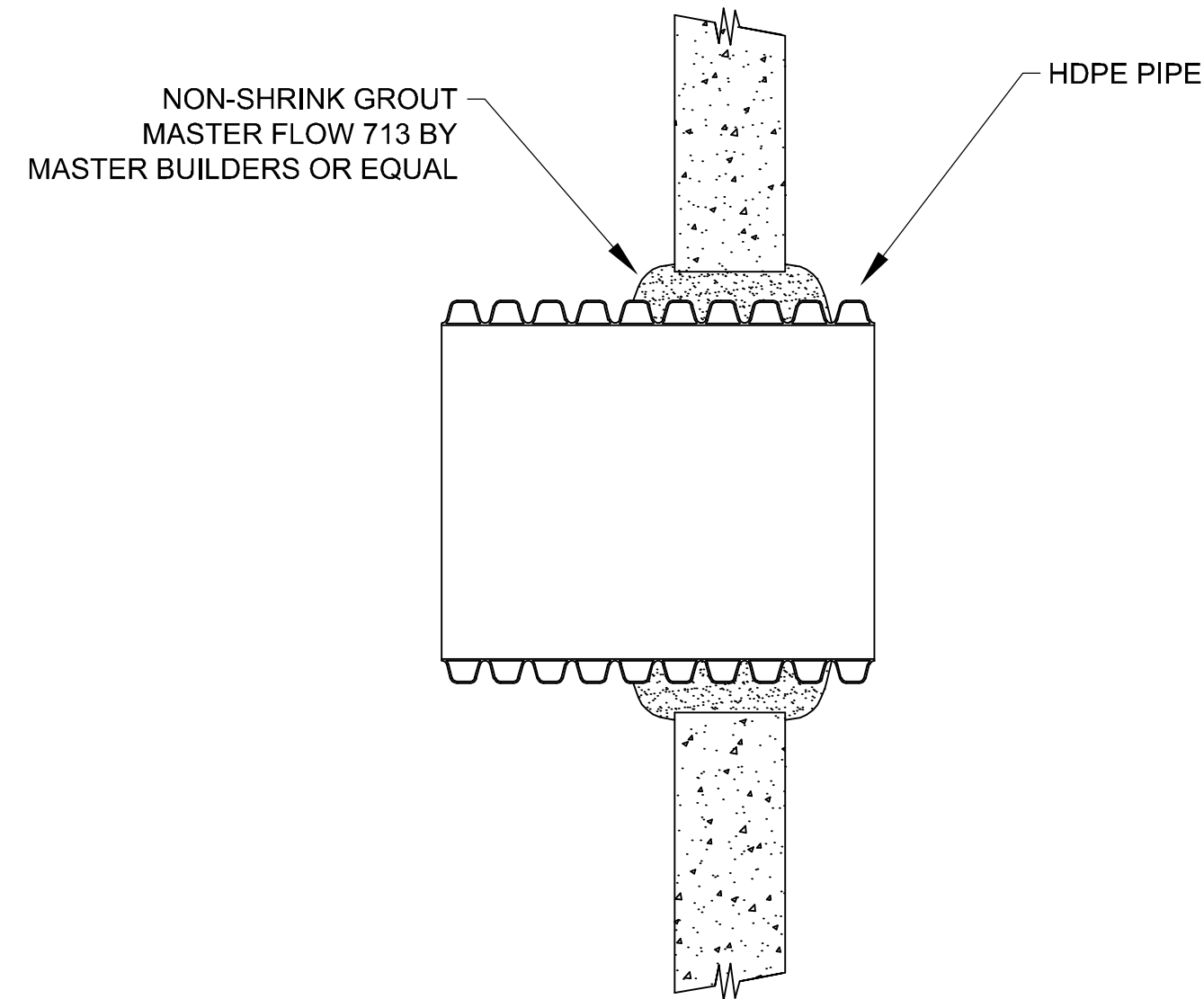
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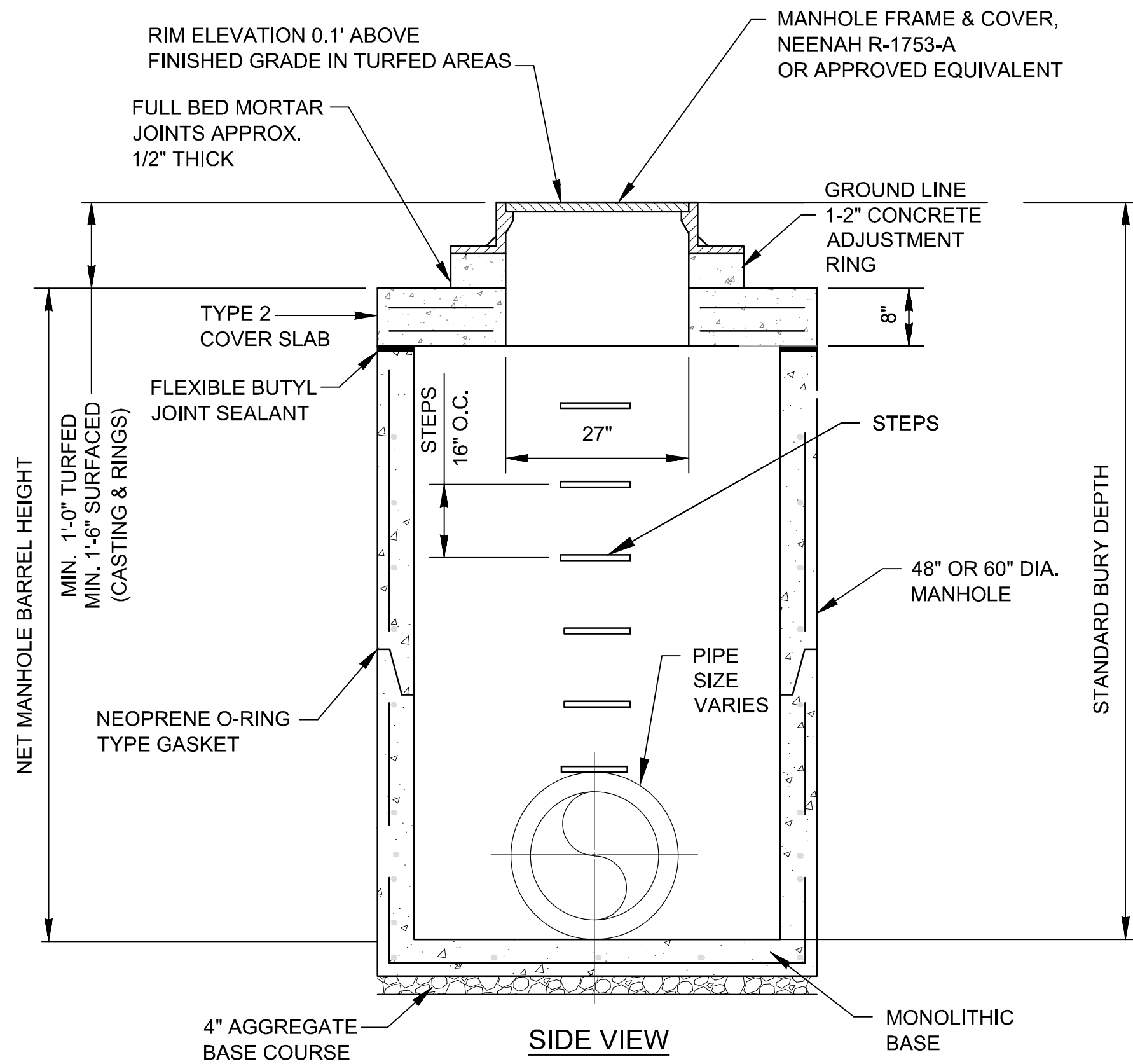
18" HDPE RISER TEE  
N.T.S.



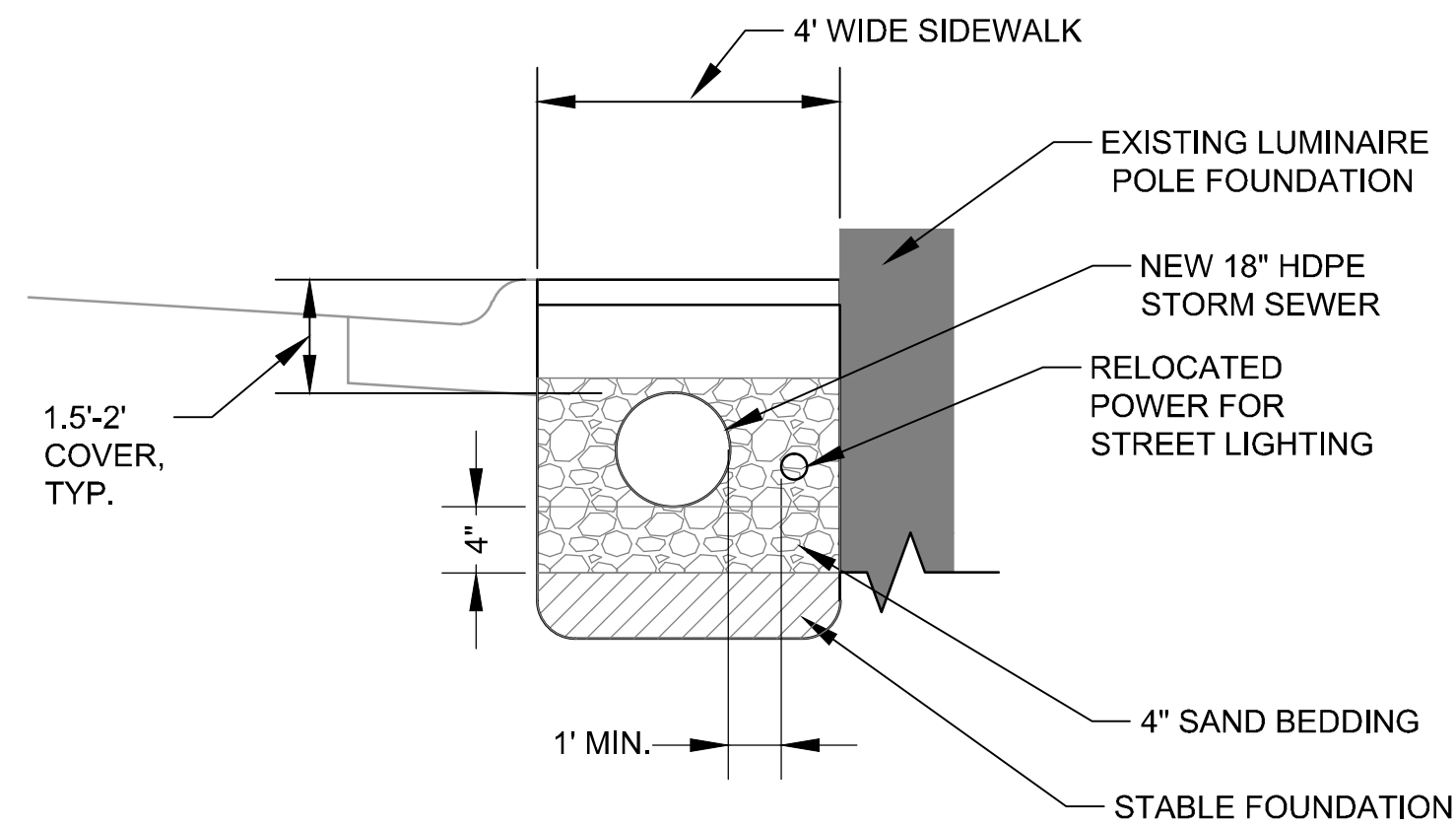
HDPE PIPE TRENCH  
N.T.S.



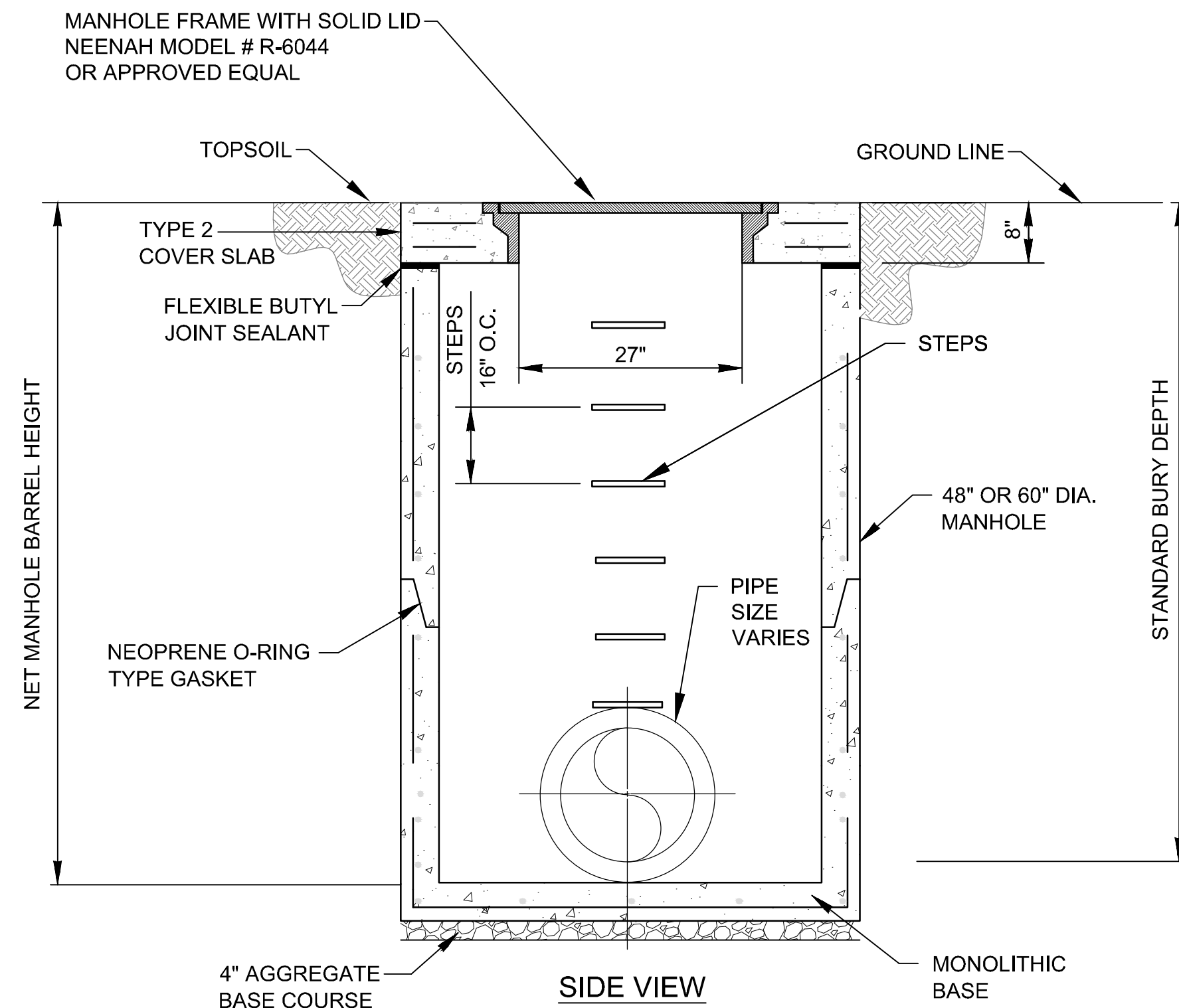
HDPE CONNECTION TO MANHOLE OR INLET  
N.T.S.



STANDARD MANHOLE  
N.T.S.



STANDARD TRENCH BENEATH SIDEWALK  
N.T.S.



MANHOLE W/ COVER SLAB  
N.T.S.

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DETAILS

C9.01

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CURB/THROAT DETAIL  
N.T.S.

CURB TRANSITION BLOCK DETAIL (TOP SLAB NOT SHOWN)  
N.T.S.

### TYPICAL SECTION

END ELEVATION

## PLAN

FRONT ELEVATION

GENERAL NOTES:

1. DESIGN LOADING: HS 20 - 44 AND ALTERNATE LOADING
2. ALL REINFORCING STEEL SHALL BE GRADE 60
3. STRUCTURAL STEEL SHALL CONFORM TO ASTM A36
4. THE 3/8" DIA. HEADED TYPE A STEEL STUD SHALL CONFORM TO SECTION 7 OF THE LATEST EDITION OF ANSI/AWS D1.1 STRUCTURAL STEEL WELDING CODE
5. AFTER WELDING IS COMPLETE GALVANIZE THE ANGLE AND STEEL STUDS IN ACCORDANCE WITH AASHTO M111 (ASTM A123)
6. USE MINIMUM 1" CLEAR COVER ON ALL REINFORCING STEEL EXCEPT AS SHOWN
7. CUT AND BEND REINFORCING STEEL IN FIELD AS NECESSARY TO FIT PIPE AND MANHOLE OPENINGS: SUCH OPENINGS ARE NOT SHOWN IN THESE DETAILS. THE NUMBER, SIZE AND LOCATION OF PIPE ENTERING THE DROP INLET ARE SHOWN ELSEWHERE IN THE PLANS
8. CAST IRON FRAME AND LID ASSEMBLY SHALL CONFORM TO AASHTO M105 CLASS 30
9. THE DIMENSION OF "H" IS IN FEET
10. INLETS SHALL BE CAST-IN-PLACE.  
PRECASTING IS NOT PERMITTED.

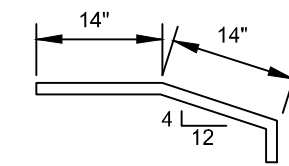
SPECIFICATION NOTES:

1. DESIGN SPECIFICATIONS: A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1992 EDITION. (SERVICE LOAD)
2. CONSTRUCTION SPECIFICATIONS: CURRENT CITY OF RAPID CITY STANDARD SPECIFICATIONS.

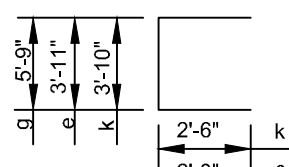
LEGEND FOR PLACING RE-STEEL
T.T.S. - TOP OF TOP SLAB
B.T.S. - BOTTOM OF TOP SLAB
T.B.S. -TOP OF BOTTOM SLAB
B.B.S. - BOTTOM OF BOTTOM SLAB
O.F.F.W. -OUTSIDE FACE OF FRONT WALL
I.F.F.W. - INSIDE FACE OF FRONT WALL
B.W. - BACK WALL
E.W. - END WALL

## BENDING DETAILS

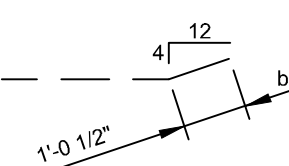
NOTE:  
ALL DIMENSIONS ARE  
OUT TO OUT OF BAR



TYPE 13



TYPE 17



TYPE 19A



	g	
	f	

MK.	SIZE	TYPE
a	5	STR.
b	4	19A
c	4	STR.
d	4	17A
e	5	17
f	4	STR.
g	5	17
h	5	17A
k	4	17
L	4	18
m	5	STR

TYPE 17A

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ADMINISTRATION

HOT SPRINGS, SOUTH DAKOTA

REVISIONS:

Project Number: 568-13-202

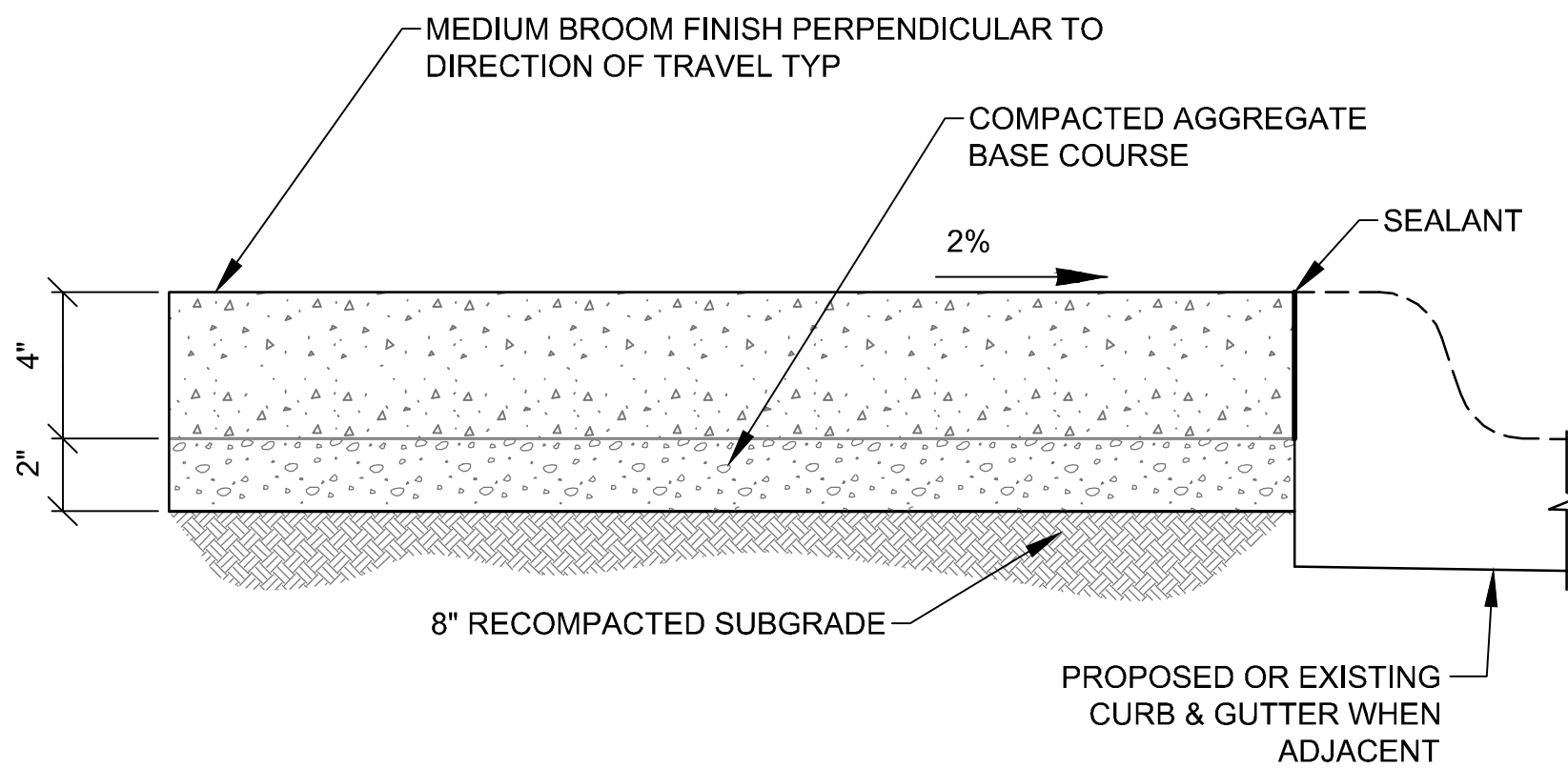
Date: 10/10/12

## DETAILS

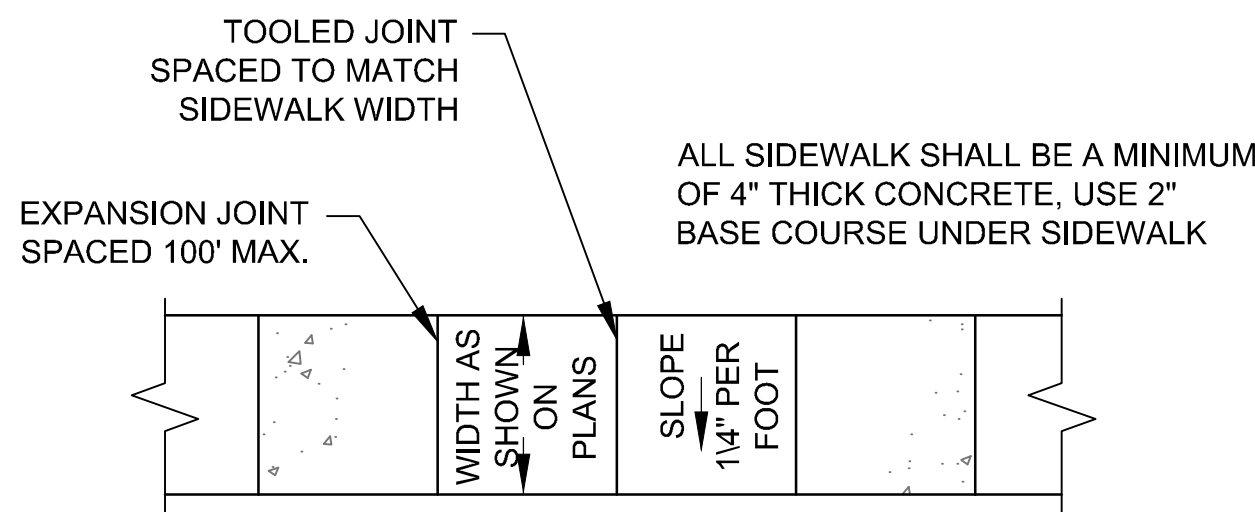
## C9.02

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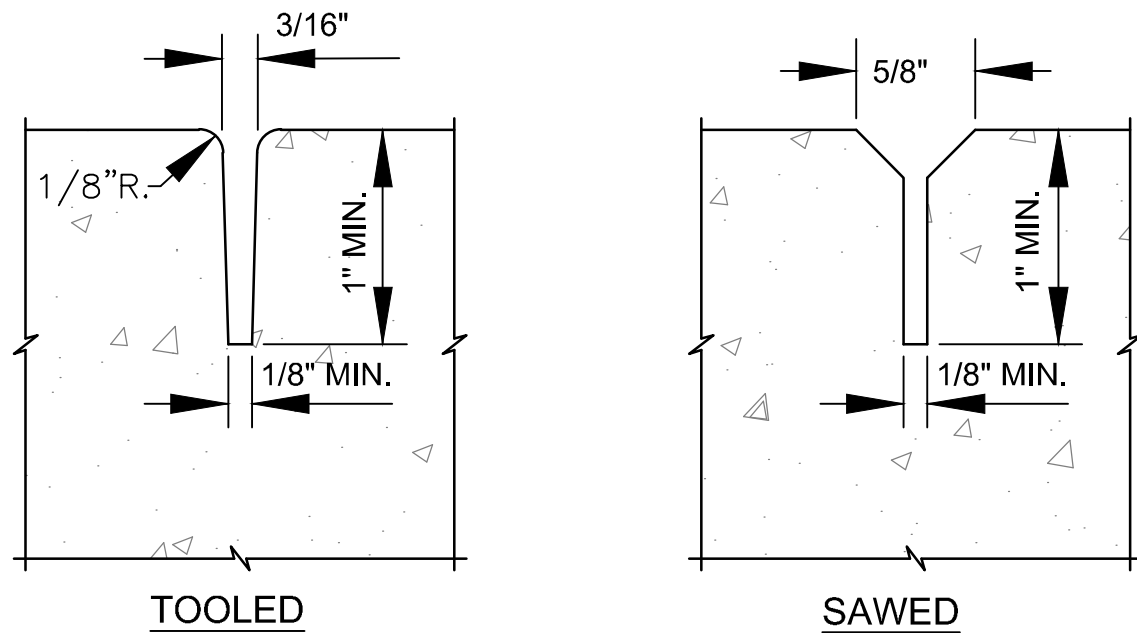




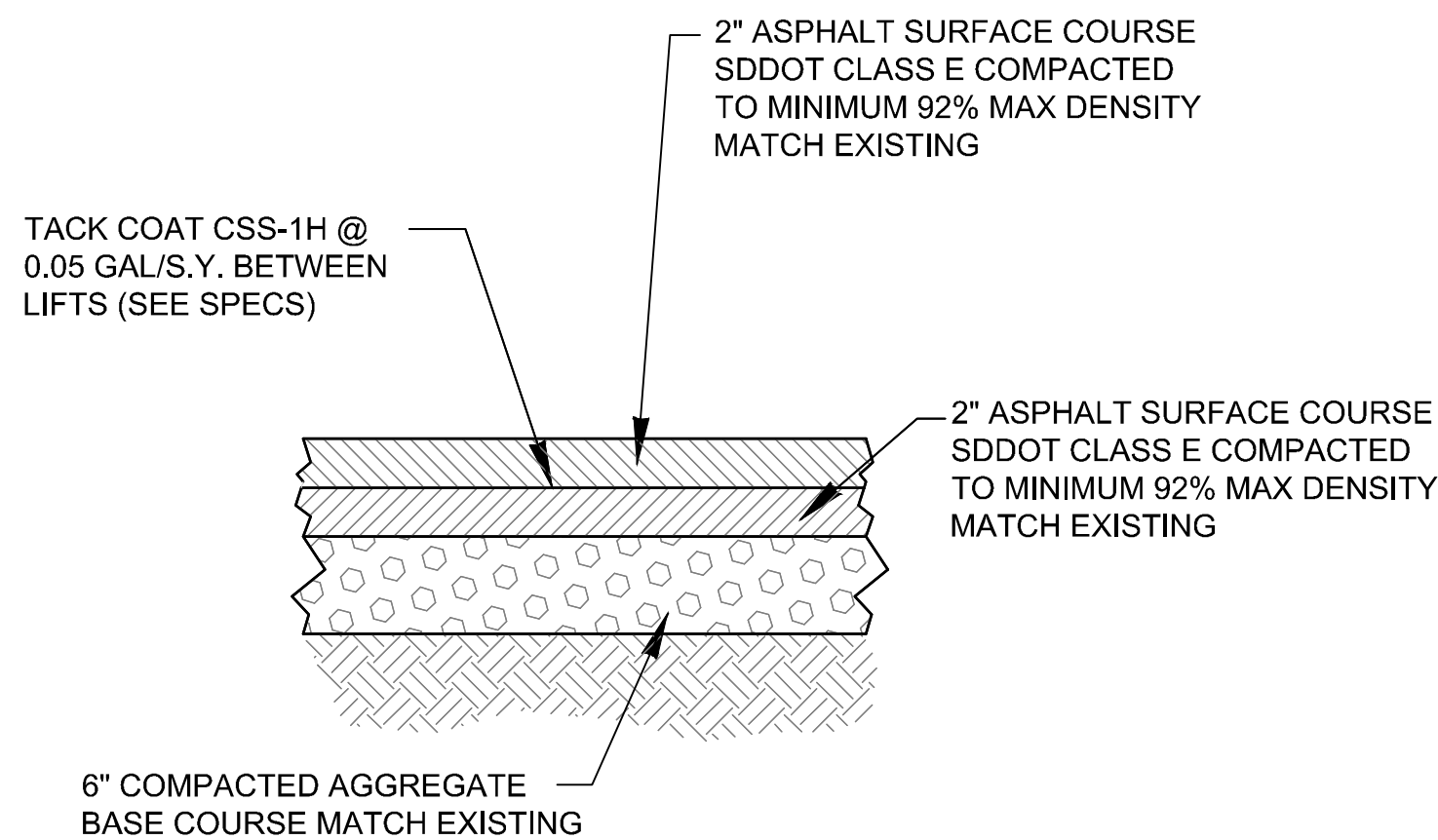
TYPICAL SECTION - 4" STANDARD CONCRETE SIDEWALK  
N.T.S.



SIDEWALK DETAIL  
N.T.S.

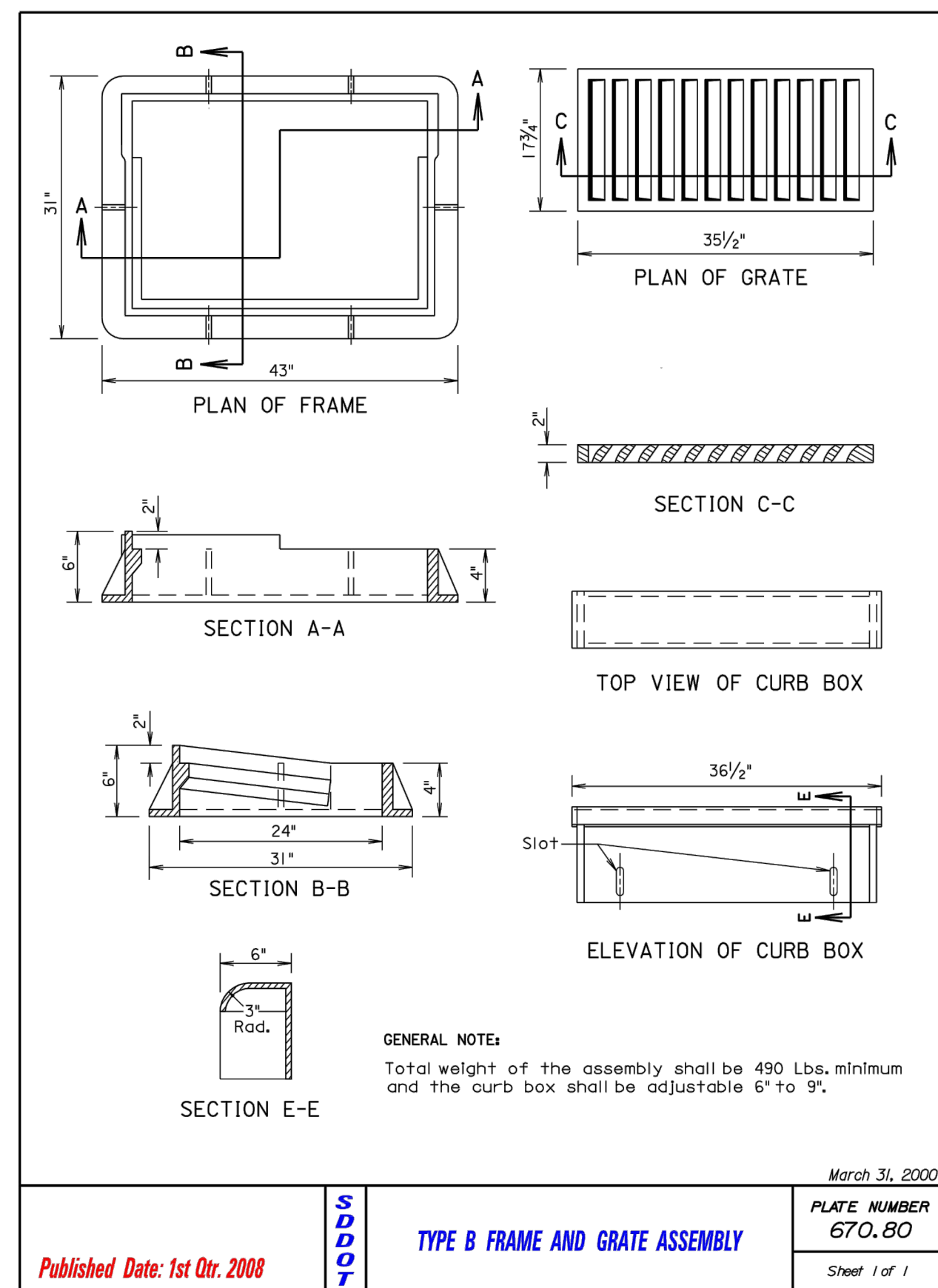
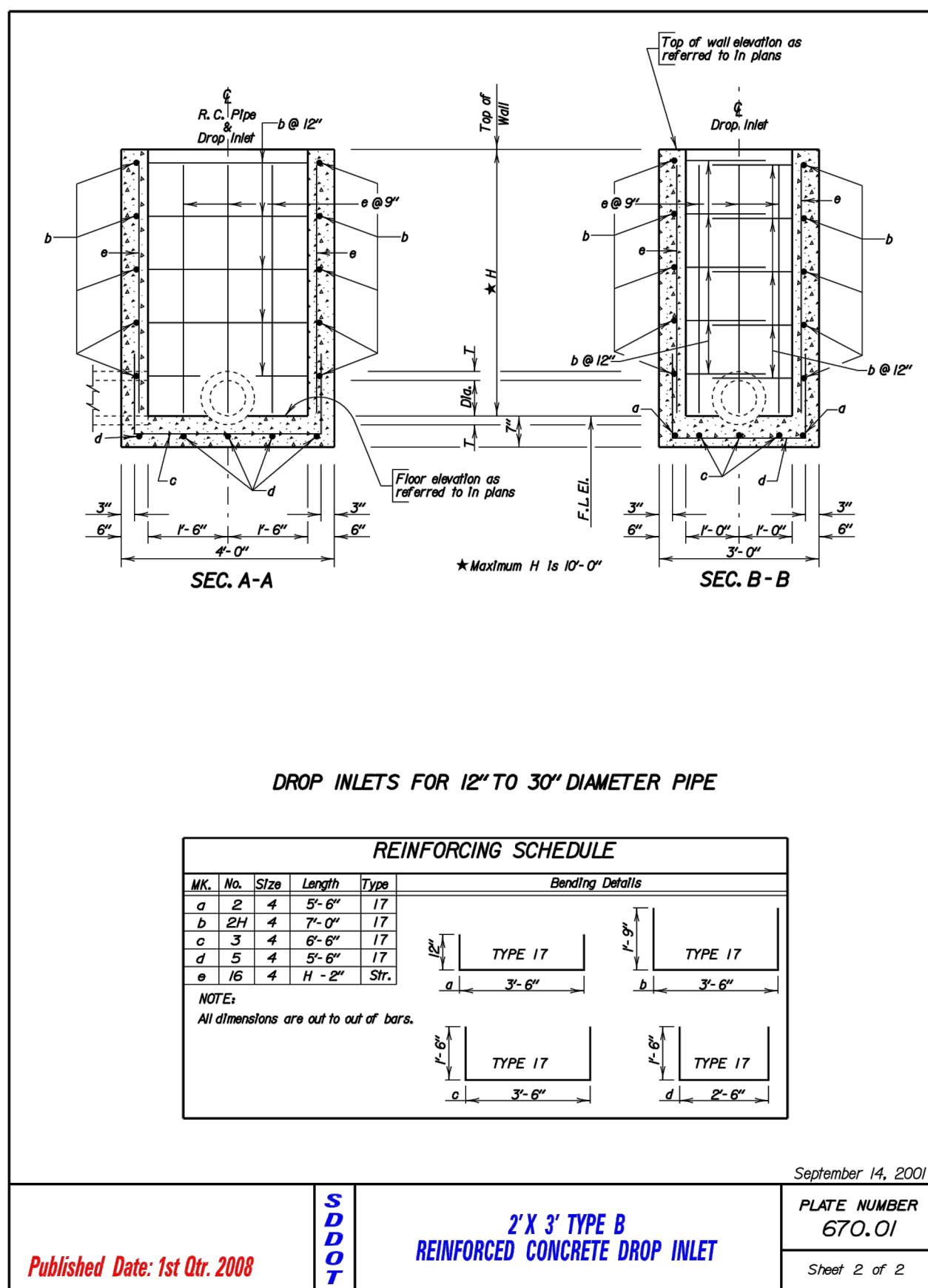
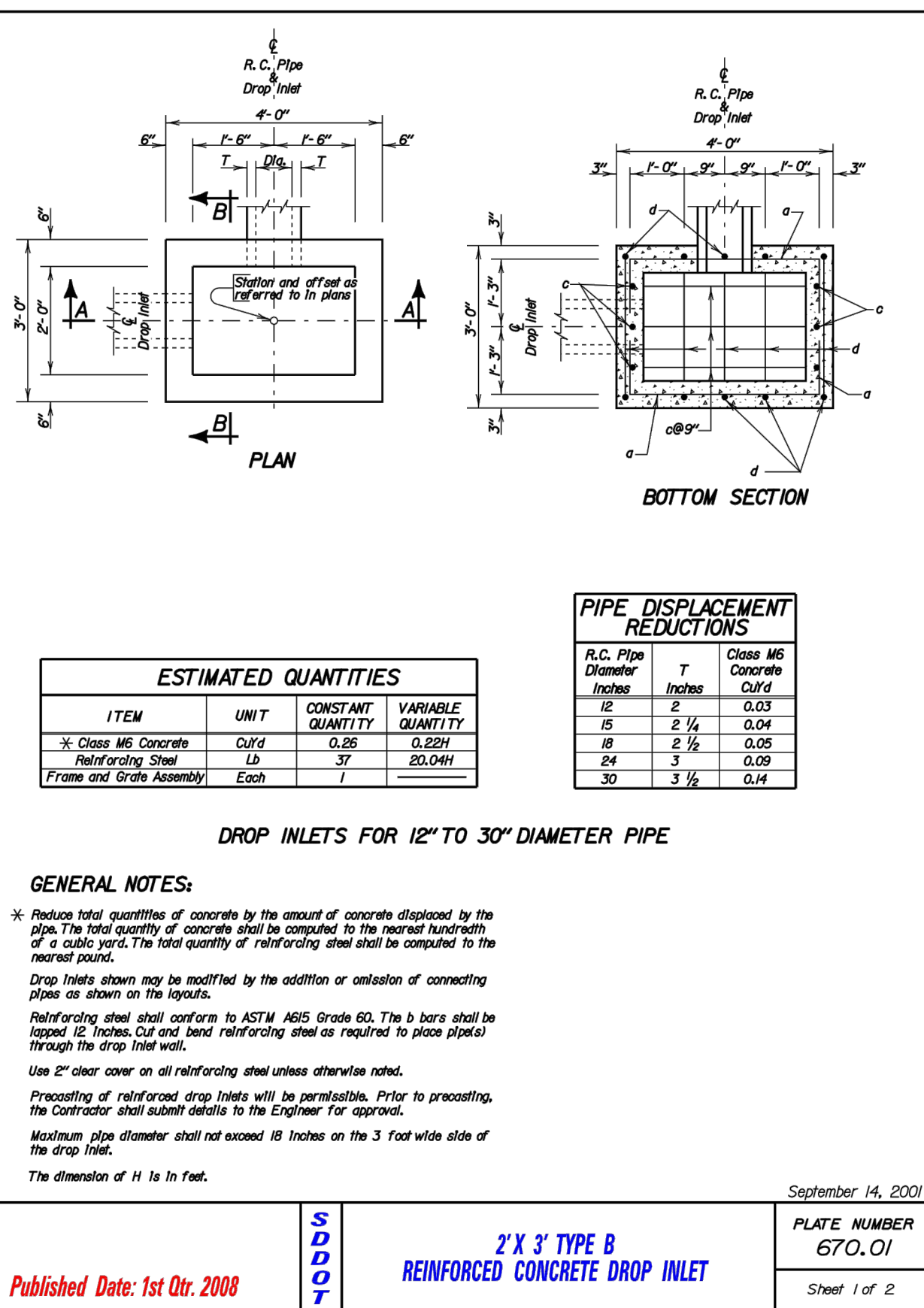


SIDEWALK JOINT DETAILS  
N.T.S.



- \* ASPHALT BINDER SHOULD BE 64-22 OR 58-28
- \* THIS DETAIL TO BE USED AT ALL LOCATIONS WHERE ASPHALT PAVEMENT IS CALLED FOR.

ASPHALT PAVEMENT DETAIL  
N.T.S.



FOR CONSTRUCTION



517 7th street  
rapid city sd 57701  
p 605.342.9470  
f 605.342.2377  
www.4front.biz



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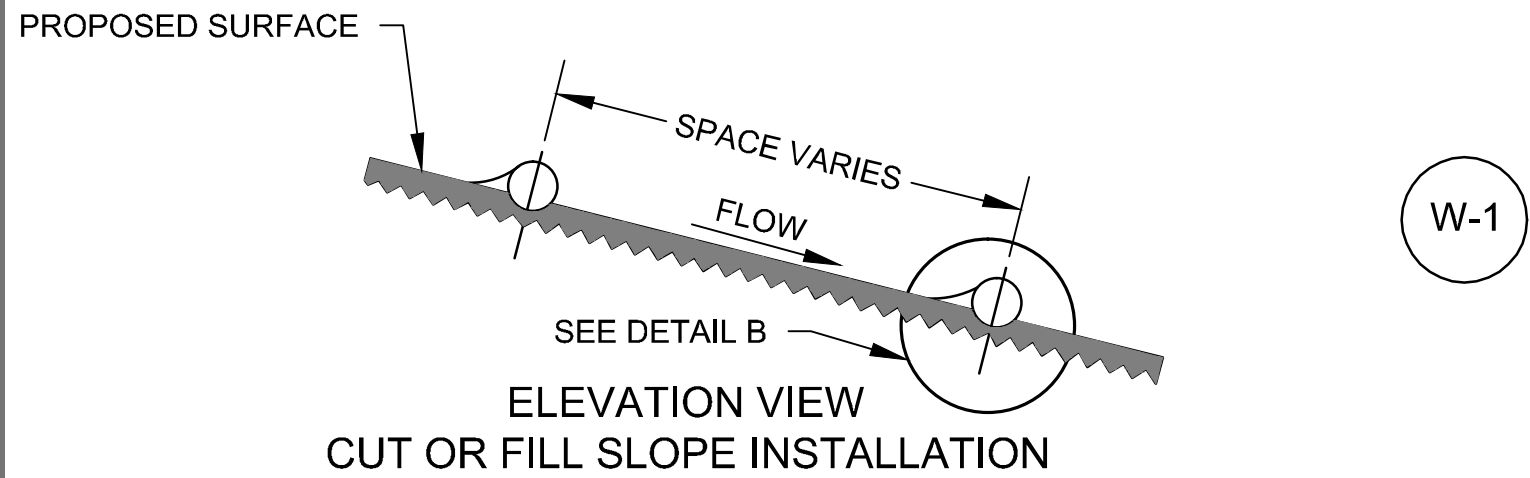
DETAILS

C9.03

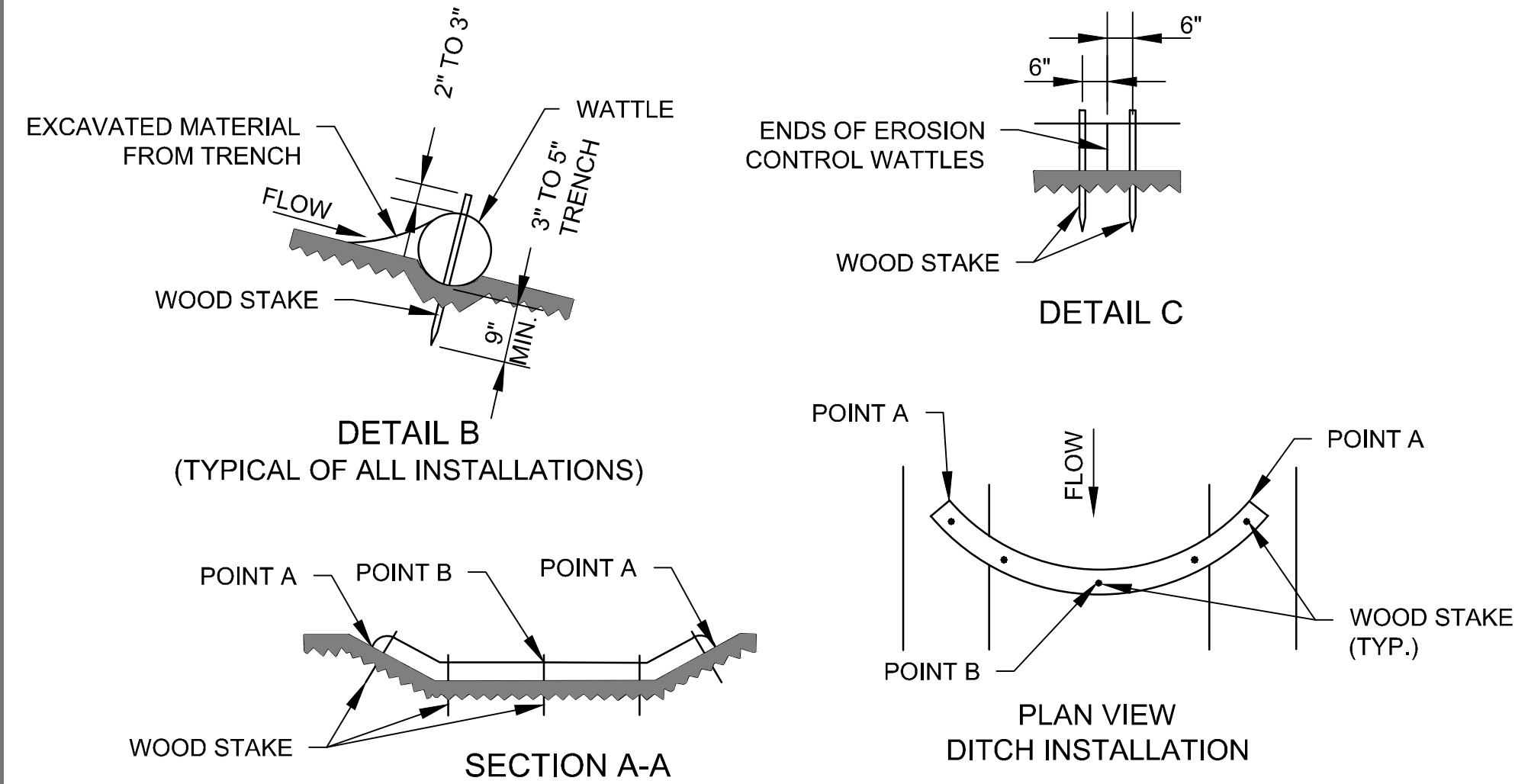
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L:\10-1749 V\SN 23 VA ID\Q1\749-012 HSVA River Street Watershed Design (12)\Drawings\ENG\SHEET FILES\1749-E12-DET01.dwg 10/26/2012 9:05:06 AM



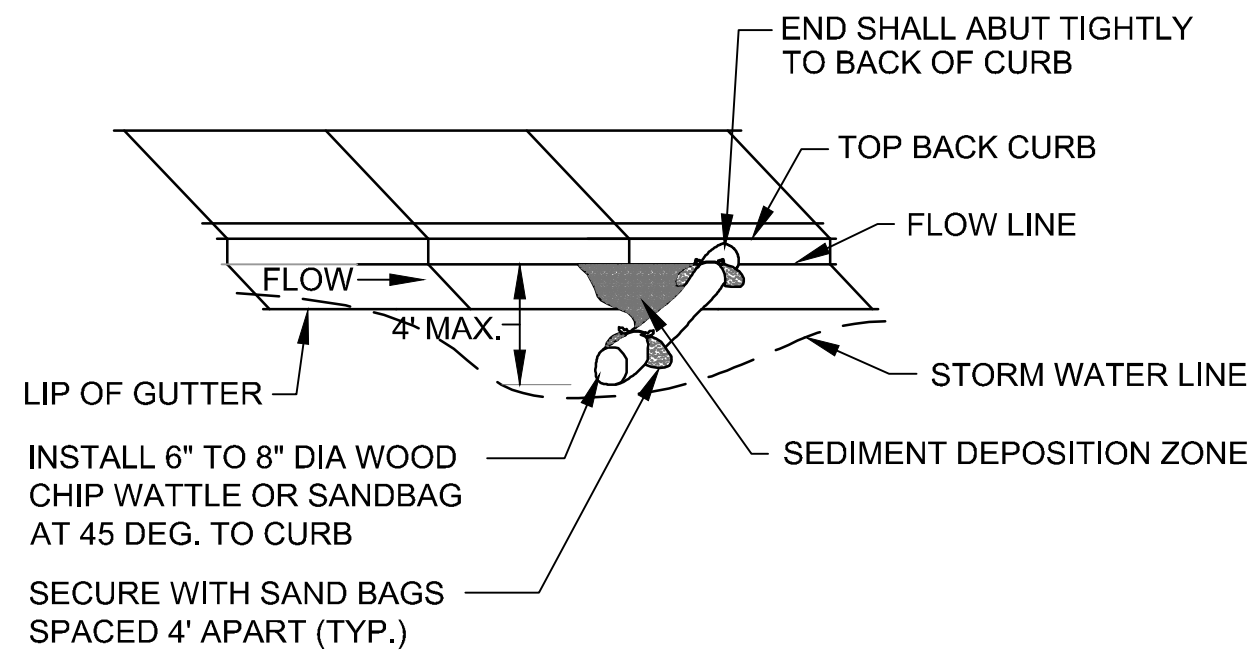
W-1



GENERAL NOTES:

1. AT CUT OR FILL SLOPE INSTALLATIONS WATTLES SHALL BE INSTALLED ALONG THE CONTOUR AND PERPENDICULAR TO THE WATER FLOW.
2. AT DITCH INSTALLATIONS, POINT "A" MUST BE HIGHER THAN POINT "B" SO THAT WATER FLOWS OVER THE WATTLE AND NOT AROUND THE ENDS.
3. THE CONTRACTOR SHALL DIG A 3" TO 5" TRENCH, INSTALL THE WATTLE TIGHTLY IN THE TRENCH SO THAT DAYLIGHT CAN NOT BE SEEN UNDER THE WATTLE, AND THEN COMPACT THE SOIL EXCAVATED FROM THE TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. SEE DETAIL B.
4. THE STAKES SHALL BE 1"x2" OR 2"x2" WOOD STAKES. HOWEVER, OTHER TYPES OF STAKES SUCH AS REBAR MAY BE USED. THE STAKES SHALL BE PLACED 6" FROM THE ENDS OF THE WATTLES AND THE SPACING OF THE STAKES ALONG THE WATTLES SHALL BE 3' TO 4'.
5. WHERE INSTALLING RUNNING LENGTHS OF WATTLES, THE CONTRACTOR SHALL BUTT THE SECOND WATTLE TIGHTLY AGAINST THE FIRST AND SHALL NOT OVERLAP THE ENDS. SEE DETAIL C.

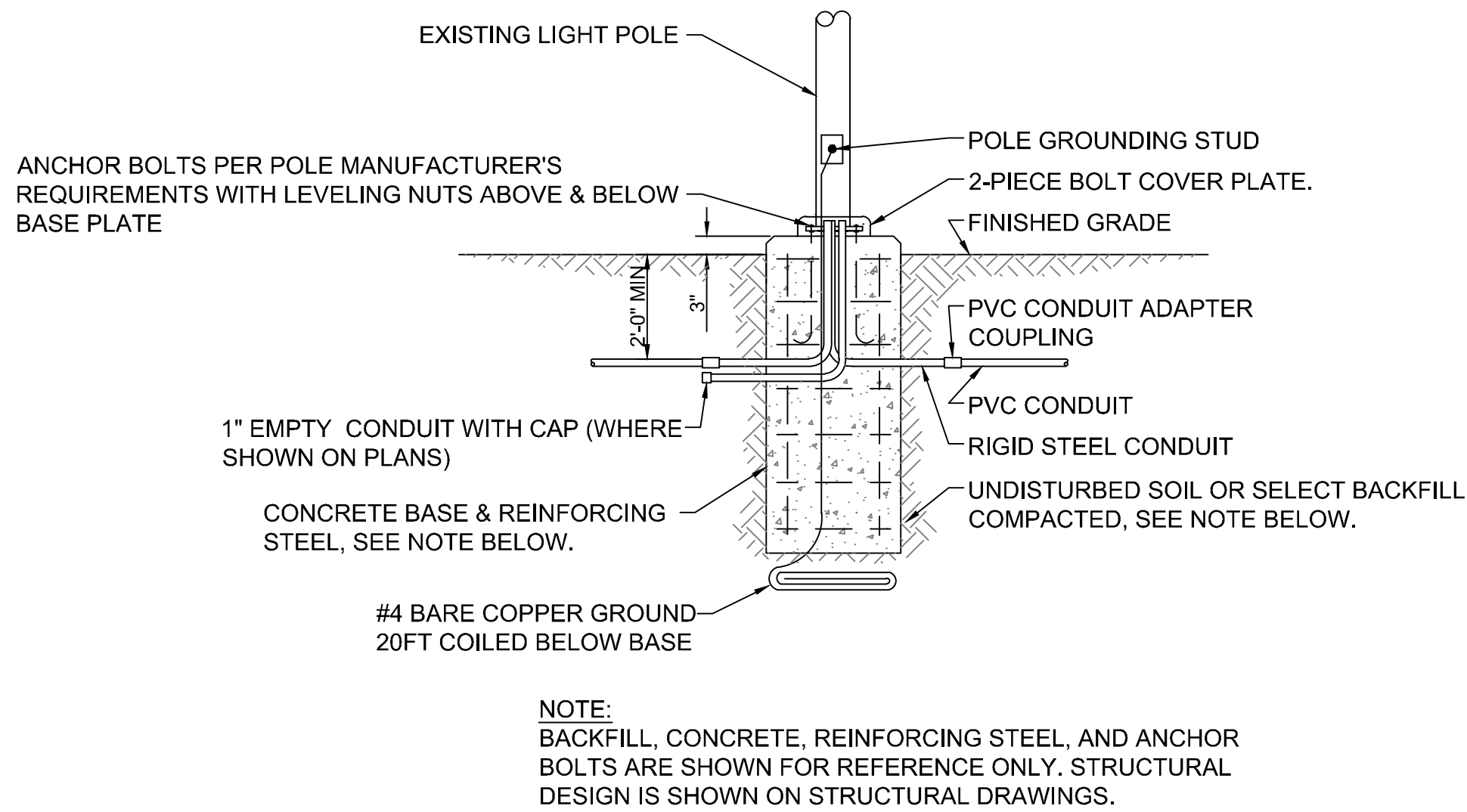
SEDIMENT CONTROL WATTLE  
N.T.S.



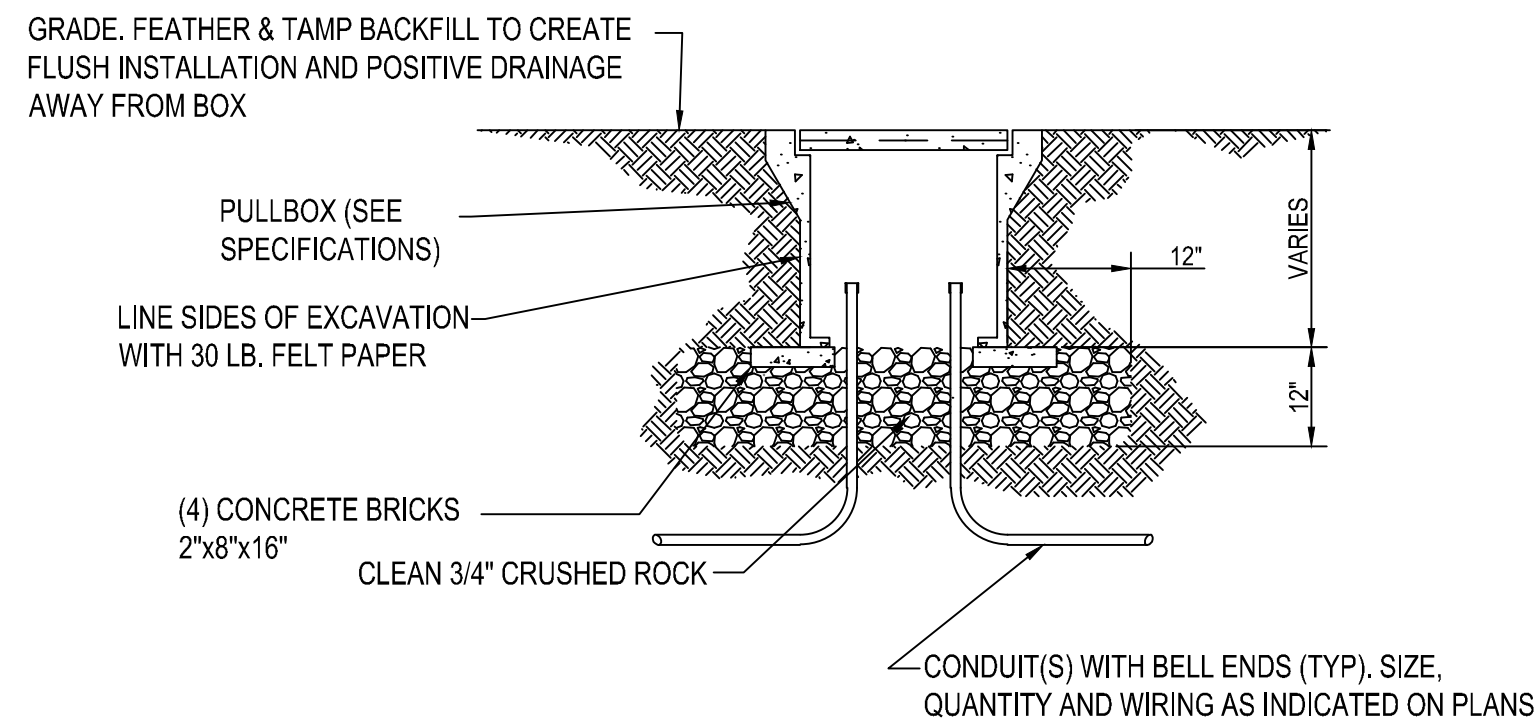
W-2

- \* INSTALL ONE OR MORE GUTTER WATTLES OR SANDBAGS BETWEEN IMPACTED INLETS AND CONSTRUCTION DISTURBANCE. NUMBER OF WATTLES AND SPACING SHOULD BE DETERMINED BY THE SITE CONDITIONS.

GUTTER PROTECTION  
N.T.S.



POLE BASE DETAIL FOR TURF AREAS  
N.T.S.



UNDERGROUND CONCRETE PULLBOX  
N.T.S.



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DETAILS

C9.04